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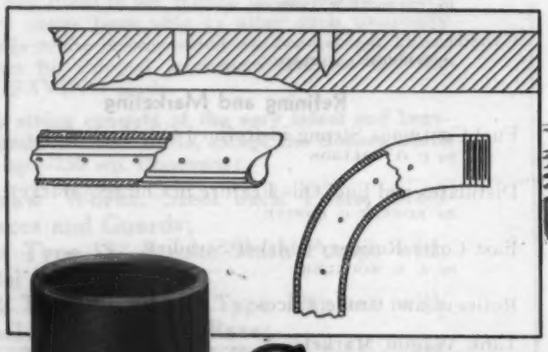

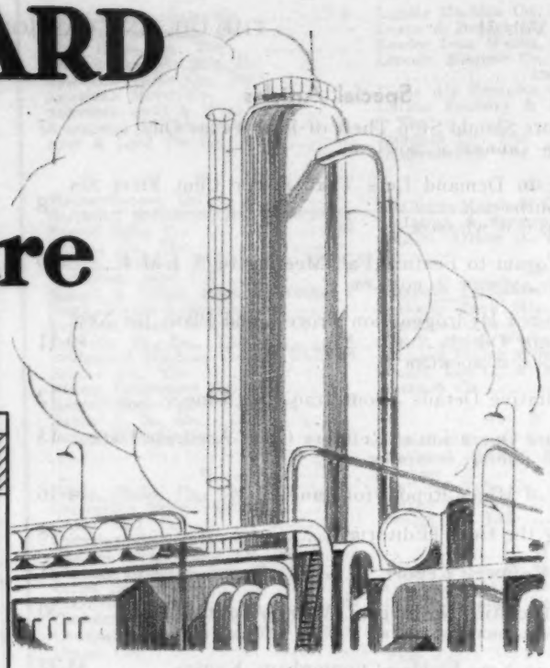

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Operators Should Stop Theft of East Texas Oil And Remove Excuse for Lower Prices

By ANDREW M. ROWLEY

FIGURES of the United States Bureau of Mines for June show improving gasoline consumption, a decrease of more than 10,000,000 barrels in crude oil production as compared to a year ago; and a decline of 9,590,000 barrels in stocks of all oils. This is a picture worth careful consideration on the part of those who have been saying prices are too high.

A weak link in an otherwise strong chain is the fact considerable crude oil is being produced in East Texas in excess of allowables. This crude is reported as moving to markets at cut prices and gasoline, manufactured from this crude, is regarded as a weakening factor in the gasoline market. Admitting it is a difficult problem to obtain legal proof of thefts of oil in East Texas because of the extensive area covered by the field and the fact there are 7,400 producing wells in the territory, it is rather unusual, to put it mildly, that so little progress has been made in stopping this practice. What has been done in the matter of arrests made? What has been done in cases where evidence was discovered that illegal practices had been used?

Certain companies are reported to have reduced their storage to a point where lower crude oil prices would be welcomed. Operators in East Texas and elsewhere should make every effort at this time to stop any practice which will act as an excuse for a reduction in prices. Various estimates have been made of the quantity of oil produced in East Texas above allowables. While none of these estimates is anywhere near as large as the quantity of crude which has been withdrawn from storage, as long as any amount of crude oil is moving to market under the regularly posted prices, buyers will have an excuse for saying present prices are too high. East Texas operators who are endeavoring to maintain the present price structure should make an insistent demand immediately for definite action on the part of state authorities to stop theft of oil.

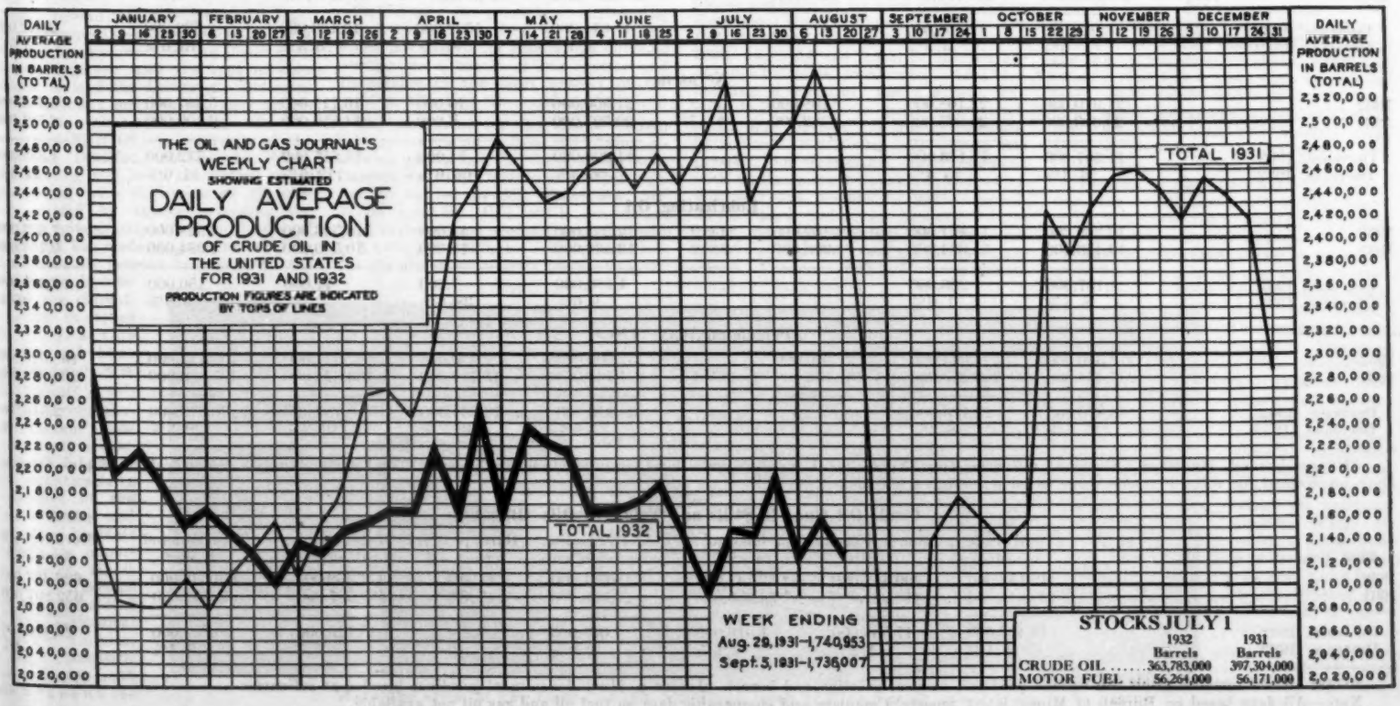
The petroleum industry was the first major business in the United States to start back to normal conditions by raising prices. It is in an especially good position to maintain this leadership and keep its place as the marshal of the parade to prosperity. Prices should be higher instead of lower and it is up to operators throughout the country to achieve this object and prevent any backward step.

Crude Oil Production in the United States

Estimated daily average production for the week ending August 13, and a comparison with previous week and one year ago, follows:

	Aug. 13	Aug. 6	Aug. 15, 1931
Oklahoma—			
Oklahoma City	103,240	105,470	4,590
Seminole-St. Louis	105,230	117,545	59,640
Remainder of State	208,425	208,405	199,710
Total Oklahoma	416,895	431,420	263,940
East Texas—			
Lathrop	122,718	125,104	172,155
Kilgore	97,722	99,698	296,278
Joiner	101,695	104,510	269,602
Total East Texas	322,135	329,312	738,035
West Texas	173,361	178,653	204,875
North Central Texas	74,486	74,235	77,544
Texas Panhandle	56,042	55,361	59,220
East Central Texas	56,273	57,546	52,597
Gulf Coast Texas	120,885	119,196	120,672
Southwest Texas	56,259	60,510	62,762
Total State of Texas	859,441	874,813	1,315,705
Kansas	92,740	93,515	102,610
North Louisiana	29,205	29,335	30,650
Gulf Coast Louisiana	32,043	31,104	28,070
Arkansas	34,060	34,115	37,390
Eastern fields	115,000	117,000	106,000
Rocky Mountain area	72,936	83,401	91,775
California—			
Santa Fe Springs	57,750	57,500	62,000
Long Beach	70,000	68,500	77,000
Playa Del Rey	14,500	14,500	23,000
Elwood	14,000	14,000	25,500
Kettleman Hills	60,500	60,250	65,000
Remainder of State	259,000	252,000	261,000
Total California	475,750	466,750	513,500
Total United States	2,128,070	2,161,453	2,489,640

Decrease 33,383 Bbls. Daily



Decline in Demand for Crude Oil, Motor Fuel, First Six Months Is Less Than 6 Per Cent

By C. O. WILLSON

Based on government data for the first six months of this year the oil industry enjoyed a business for its principal product and a total demand for all oils of better than 94 per cent of the same period last year. In the face of adverse reports regarding gasoline consumption from many areas, the government compilation for the entire United States, shows that the domestic demand for motor fuels was only 5.3 per cent less than the first half of 1931. Exports declined 10.6 per cent so that the total demand (domestic demand plus exports) was 5.8 per cent less than the first six months of 1931.

The situation in the industry generally is indicated by the data which show that the demand for all oils the first half year totaled 476,548,000 bbls. a decrease of 26,804,000 or 5.3 per cent bbls. when compared with the same period of 1931. Among the minor products the government latest report shows an actual increase of 12.5 per cent in the domestic demand for kerosene the first six months. This increase was partially offset with a continued decline in the export demand but even with this decrease, the total demand for kerosene was 5.4 per cent greater than the same period in 1931.

In regard to motor fuels, the June report shows a small increase in the domestic demand over June, 1931, with an upturn in exports amounting to 8 per cent. The June report probably will prove misleading as indicating the comparative situation this year and last in regard to the demand for motor fuels at the start of the summer season. The government reports on motor fuel demand are based on shipments from refineries, natural gasoline plants and benzol plants and also take into consideration changes in stocks at the major bulk terminals. During June large shipments were made from all manufacturing plants and terminals to jobbers before the Federal tax of 1 cent became effective June 21. This gasoline was run to bulk oil stations but is shown as domestic demand in the government report. Those familiar with this situation believe that the Federal tax resulted in an abnormally heavy demand in June which was compensated for in July when shipments from refineries and other manufacturers of motor fuels were unusually dull. Taking June and July of this year and last probably will give an accurate comparison of the motor fuel demand for the first two summer months.

Period of Decreases

The first six months as shown in the accompanying table were largely a period of decreases in which crude oil producers and refiners strove to offset a decreasing demand with decreased output. The record in the matter of crude oil was not as satisfactory, this year as last year. The first half of last year the demand for crude oil exceeded the available supply by 10,725,000 bbls., while this year for the same period only 2,953,000 bbls. were withdrawn from storage. Crude oil stocks on June 30 were 33,521,000 bbls. less than on the same date in 1931.

The domestic production of motor fuels decreased 5.5 per cent but the decline in total supply was reduced to 5 per cent, due to the fact that imports increased 601,000 bbls. or 8.5 per cent. This increase reflects the action of importers who increased their inshipments when it became apparent that an excise tax was to be levied by the Federal government. This excise tax of 2½ cents became effective on June 21 along with a one-half cent per gallon tax on crude oil and refined products other than gasoline. Imports the first six months of this year represented less than 8 per cent of the total supply of crude oil and approximately 3.5 per cent of the total supply of motor fuels. With the new taxes in effect for the last half of the year, statisticians are specially interested in the shift in supplies which is expected to practically eliminate gasoline imports and materially reduce crude oil imports. Imports have also been of importance in fuel oil and gas oil but are of little or no consequence in the total supplies of other refinery products.

Lubricating Oils

Manufacturers of lubricating oils have been getting their house in order despite a small decrease in total demand the first six months. The supply of lubricating oils was reduced 8.8 per cent the first six months being a continuance of the 1931 trend toward reduced output which accounts for the fact that on June 30 inventories of lubricating oils were 25 per cent less than on the same date last year.

Crude Oil and Refinery Situation Summarized—First Six Months, 1932-1931

Supply and Demand—Crude Oil (Bbls.)

First 6 months—	Total supply	Total demand*	Excess Demand	Excess Pct.	Domestic production	Imports	Domestic demand*	Exports	Stocks June 30
1932	429,876,000	432,829,000	2,953,000	.6	397,632,000	32,244,000	418,650,000	14,179,000	363,783,000
1931	445,908,000	456,633,000	10,725,000	2.4	420,399,000	25,509,000	444,780,000	11,853,000	397,304,000
Decrease, 1932	16,032,000	23,804,000	.....	....	22,767,000	†6,735,000	26,130,000	†2,326,000	33,521,000
Decrease, 1932	3.6%	5.2%	.....	....	5.4%	†26%	5.8%	†19.6%	8.4%

*Derived from government data for comparative purposes. †Increase.

Supply and Demand—Refinery Products—Motor Fuel (Bbls.)

First 6 months—	Total supply	Total demand*	Excess Supply	Excess Pct.	Domestic production	Imports	Domestic demand*	Exports	Stocks‡ June 30
1932	207,889,000	203,037,000	4,852,000	2.4	200,255,000	7,634,000	181,785,000	21,251,000	38,526,000
1931	218,902,000	215,691,000	3,211,000	1.5	211,869,000	7,033,000	191,908,000	23,783,000	41,198,000
Decrease, 1932	11,013,000	12,654,000	.....	....	11,614,000	†601,000	10,123,000	2,532,000	2,672,000
Decrease, 1932	5%	5.8%	.....	....	5.5%	†8.5%	5.3%	10.6%	6.5%
Kerosene									
1932	21,910,000	22,108,000	*198,000	*.9	21,900,000	10,000	16,711,000	5,397,000	5,134,000
1931	20,603,000	20,965,000	*362,000	*1.7	20,597,000	6,000	14,856,000	6,109,000	6,521,000
Decrease, 1932	†1,307,000	†1,143,000	.....	....	†1,303,000	†4,000	†1,855,000	712,000	1,387,000
Decrease, 1932	†6.3%	†5.4%	.....	....	†6.3%	†66.6%	†12.5%	11.6%	21.3%
Lubricating Oil									
1932	12,260,000	14,431,000	*2,162,000	*14.9	12,258,000	11,000	10,503,000	3,928,000	7,323,000
1931	13,456,000	14,664,000	*1,208,000	*8.2	13,438,000	18,000	10,580,000	4,084,000	9,763,000
Decrease, 1932	1,187,000	233,000	.....	....	1,180,000	7,000	77,000	156,000	2,440,000
Decrease, 1932	8.8%	1.6%	.....	....	9.6%	38.8%	.7%	3.8%	25%
Petroleum Wax (Lbs.)									
1932	274,350,000	247,044,000	27,306,000	11	252,000,000	22,350,000	142,331,000	104,713,000	198,526,000
1931	237,474,000	209,230,000	*31,756,000	*13.4	221,760,000	15,714,000	133,844,000	135,386,000	200,836,000
Decrease, 1932	†36,876,000	22,186,000	.....	....	†30,240,000	†6,636,000	†8,487,000	30,673,000	2,310,000
Decrease, 1932	†15.5%	8.2%	.....	....	†13.6%	†42.2%	†6.3%	29.3%	1.1%

*Excess demand. †Increase. ‡Stocks at refineries only. Note—Total supply equals domestic production plus imports. Total demand equals domestic demand plus exports. Data on demand for refined products are based on refinery shipments.

Crude Oil Runs to Stills and Total All Oils (Bbls.)

First 6 months—	Total crude to stills	Domestic crude to stills	Foreign crude to stills	Nat. gasoline production	Gaso. recovery crude oil‡	Total supply all oils*	Total demand all oils*	Stocks all oils June 30
1932	419,158,000	396,417,000	22,741,000	18,681,000	47.0%	471,458,000	476,548,000	626,487,000
1931	438,641,000	413,982,000	24,659,000	23,369,000	47.6%	489,587,000	503,352,000	652,897,000
Decrease, 1932	19,483,000	17,565,000	1,918,000	4,688,000	.....	18,129,000	26,804,000	26,410,000
Decrease, 1932	4.4%	4.2%	7.8%	2.0%	.....	3.5%	5.3%	4%

*Total all oils includes crude oil, refined products, natural gasoline and benzol. †Increase. ‡Includes natural gasolines blended at refineries.
Note—All data based on Bureau of Mines' latest reports. Complete and comparable data on fuel oil and gas oil not available.

Open Forum Discussion of Pertinent Subjects Will Feature Fall Meeting of A. I. M. E.

By ANDREW M. ROWLEY

What promises to be one of the most important and interesting meetings of the year for the petroleum industry is the fall meeting of the Petroleum Division of the American Institute of Mining and Metallurgical Engineers to be held in Ponca City, Okla., September 30 and October 1. The Continental Oil Co. has tendered the division the use of the Conoco Club buildings and grounds for the sessions, which makes an ideal setup for such a gathering, combining as it does exceptional facilities for the meeting in addition to unusual recreational and relaxatory advantages.

While the fall meeting of the Petroleum Division of the A.I.M.E. usually

EARL OLIVER

attracts around 200 executives and engineers, widespread interest in the subjects arranged for discussion at the Ponca City meeting, together with the type of men selected to lead the discussions, indicates the forthcoming meeting will have an attendance far above the average. In this connection Earl Oliver, chairman of the Petroleum Division, advises the Ponca City meeting will be in the nature of an open forum with discussion on all subjects invited by anyone attending the meeting, immediately after the leader of the subject has made the opening talk. He also states all persons interested in the subjects to be discussed are cordially invited to attend the Ponca City meeting whether they be members of the Institute or not.

The accompanying program needs no elaboration. Doctor Leith is one of the outstanding authorities of the United States and has done notable work in the mineral industry. He is slated to become the next president of the Geological Society of America, a high, scientific honor. Doctor Leith will present the broad aspects of a conservation program, linking the work in the petroleum industry with what has been done and is being done in other mineral industries and with natural resources.

The entire petroleum industry will be interested in the presentation of the subject "A Rational Program for the Oil Industry" by W. S. Farish, president of the Humble Oil & Refining Co. Mr. Farish is acknowledged to be an exceptionally keen thinker and analyst and one of the most powerful leaders in the oil business. E. H. Griswold and J. B. Umpleby are known throughout the industry for their contributions to petroleum engineering knowledge and practices, while Mr. Hardwicke has gained for himself an enviable position as a result of his studies and discussions of the legal aspects of the problem affecting the petroleum industry.

The movement for the use of bottom hole pressures as a basis for fixing allowable production in flush fields adds interest to the symposium on this subject to be led by Mr. Hawthorn, Mr. Wilde and Mr. Gill, while production men, engineers and executives undoubtedly will gain much valuable information from the discussion of subjects assigned to Mr. Wilson, David Donoghue, K. B. Nowels and C. M. Young.

E. O. Bennett, chief engineer of the Continental Oil Co. is chairman of the arrangements committee for the meeting. Nothing more need be said about the arrangements. When Ed Bennett heads a committee things move fast and towards a definite object and that object in this case is to make everyone attending the Ponca City meeting entirely comfortable and happy.

Mr. Bennett has a background to work on for this meeting which probably surpasses anything of its kind outside of the Broadmoor Hotel at Colorado Springs. The Conoco Club and Quah-Ta-See-Da Golf Club, which for the A.I.M.E. meeting are one and the same, consists of a large club building, a dormitory and a garage. The club building has a large open porch which may be used for dining purposes, in addition to a dining hall seating 300 persons; an auditorium, fully equipped with motion picture apparatus and which will seat 324 persons in leather upholstered opera chairs; an immense lounge room most comfortably furnished, and numerous smaller conference or class rooms. The dormitory will be available to a limited number of guests attending the meeting. It adjoins the club building and is fully equipped with showers, running ice water, etc. The 18-hole golf course adjoins the club house. And the Wents swimming pool, reputed to be the finest outdoor swimming pool in America, is not far from the club, as is also another 18-hole golf course which will be open to those attending the meeting.

Ed Bennett or another of the Continental Oil Co. officials has described the club as follows: "A place to dine, to dance, to play, to rest—to live in comfortable contentment through long summer days and into breeze-cooled nights. A place with the smartness of Park Avenue, the architecture of Taos, the surroundings of the storied Osage Hills, the recreational advantages of Forest Hill or Broadmoor, and the atmosphere of home itself. A country club and a town club in one; a place where guests will gasp in wonderment, where family and friends will never tire and where you, golf hungry, cafe jaded, or plain lazy, can play, dine or loll in sprawling ease. That's Qua-Ta-See-Da.

"Spanish in motif and Aztec in decoration, the architecture and appointments of the structures are reminiscent of Santa Fe, Hermosillo or Cuernavaca.

"The interior fittings are in harmony with the cool gray plaster walls. Woodwork is rough hewn from native timber. Curious designs embodying Hispano-Indian symbolism are chiseled into panel and ceiling, fireplace and window frame and all splashed fancifully in curious color schemes. There are nooks for companionable chats or solitary pipes and deep snuggly chairs of red leather which whisper the allurement of slumber."

After a visit to the club, I say, "Them's my sentiments."

Program, Fall Meeting, Petroleum Division, A. I. M. E.

To be held at Ponca City (Conoco Club), September 30-October 1

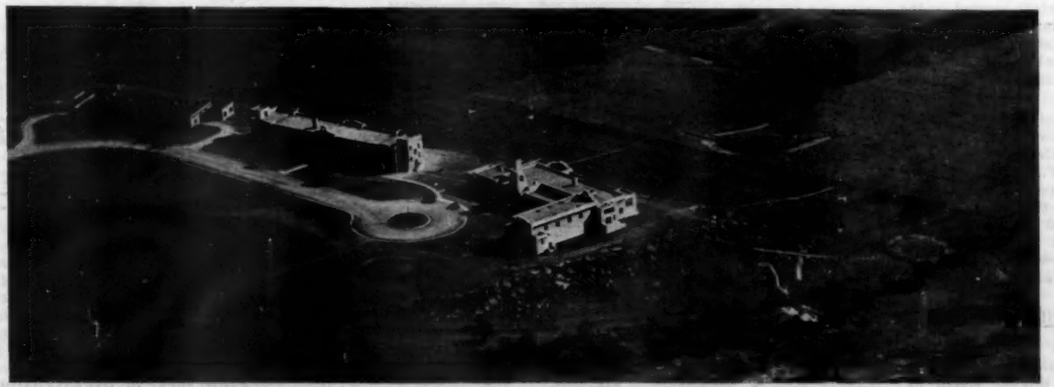
FIRST DAY—FRIDAY—TWO SESSIONS

Symposium on Rationalizing Oil and Gas Production

1. "The Place of Government, State and Federal, in Rationalizing Mineral Production," by C. K. Leith, chairman, department of geology, University of Wisconsin, and chairman of the mineral inquiry, A.I.M.E.
2. "A Rational Program for the Oil Industry," by W. S. Farish, president Humble Oil & Refining Co.
3. "Recoverable Oil and Gas Content of Land as Suitable Standard of Each Owner's Rights," by E. H. Griswold, petroleum engineer, Continental Oil Co.
4. "Reservoir Energy; Its Source, Ownership, and Utilization," by J. B. Umpleby, petroleum engineer, Norman, Okla.
5. "Restricting Output to Market Demand," by Robert E. Hardwicke, attorney, Fort Worth, Tex.
6. "Interstate Compact; Its Purpose and Scope," round table discussion. Leader to be selected.
7. "Developing United Action and Public Support," round table discussion. Leader to be selected.

SECOND DAY—SATURDAY—TWO SESSIONS

1. "Symposium on Bottom Hole Pressures," by D. A. Hawthorn, Barnsdall Oil Co.; H. D. Wilde, Jr., Humble Oil & Refining Co.; and Stanley Gill, Houston, Tex.
2. "Critical Study of Proper Types of Screen Pipe," by S. G. Wilson, Venezuela Gulf Corp.
3. "Appraisal of Various Methods of Proration," by David Donoghue, Fort Worth, Tex.
4. "Natural and Artificial Methods of Water Flooding," by K. B. Nowels, Forest Oil Co.
5. "Engineering Education," round table discussion. Led by C. M. Young, professor mining engineering, University of Kansas.



Airplane view of the Conoco Club buildings, with golf course at upper right

E. O. BENNETT

Explain Main Features of Hydrogenation Process And Announce Plans for New Motor Oil

By A. E. MOCKLER
New York Bureau, The Oil and Gas Journal

NEW YORK, Aug. 15.—The main features of the hydrogenation process as applied to petroleum refining were made known this week in connection with the announcement that one of the products of the process "Essolube," a new motor oil, would be placed on sale next week at the stations of the Standard Oil Co. of New Jersey and some of its subsidiary companies. The oils are manufactured at the Bayway, N. J., refinery of the Standard of New Jersey and the Baton Rouge, La., refinery of the Standard Oil Co. of Louisiana.

For the purpose of making complete operating details public, an inspection trip to the hydrogenation plant was given by the company a few days ago, the guests including writers, technical men and a number of large buyers of refined products, as well as numerous company officials.

The Bayway hydrogenation plant, which is currently running between 2,500 and 3,500 bbls. per day, in reality consists of two units, each housed in a separate concrete stall, somewhat resembling a heavy gun emplacement, which affords protection from both fire and explosion hazards. Each unit has a daily charging capacity of from 2,500 to 5,000 bbls., according to the kind of charging stock and the type of products being manufactured. A feature of the plant is its extreme flexibility, permitting of the use of only individual units when desired and quick changeovers from one product to another. At present the unit in operation is running Colombian distillate for the production of "Essolube," the company's new product. In the production of antiknock gasoline, it is possible to attain a total feed charging capacity in the neighborhood of 5,000 bbls. per day in each unit. Unlike older refining processes, there is no loss in operations; on the contrary, output is approximately 4 per cent in excess of throughput, due to the addition of hydrogen.

The manufacture of hydrogenated lubricating oils is largely a liquid phase operation, the oil being charged into the reaction towers in the liquid form at a temperature approximately 800° F. Production of antiknock gasoline, on the other hand, takes place in the vapor phase at a temperature around 1,000° F.

Operation of Process

Hydrogen for the process at Bayway is derived from cracking coil gas, the plant at present manufacturing about 2,000,000 cubic feet daily, although at capacity it can generate up to 7,000,000 cubic feet per day. The cracking coil gas first receives a preliminary scrubbing at the gasoline recovery plant located in the refinery proper, adjoining, and is then treated in a Koppers system and caustic washer for the removal of sulphur constituents, after which it is ready for the reforming furnaces.

Here the purified refinery gas, mixed with steam, passes through tubes packed with catalyst and heated to a temperature of about 1,800° F., with a pressure of approximately 15 pounds per square inch. Through the reaction of the hydrocarbons in the gas with the steam a mixture of hydrogen and carbon monoxide is produced. The following chemical reaction is given as being typical of this step:

$$CH_4 + H_2O = 3H_2 + CO$$

The heat from the flue gas coming from the reforming furnaces is utilized in the production of process steam by means of a waste heat boiler, and with this installation it is possible to make approximately 50 per cent of all the steam required in the hydrogenation process.

The "police department" of the hydrogenation plant. Hydrogen coming from the compressors is tested continuously in this special device. The presence of anything approaching a dangerous percentage of oxygen is immediately recorded, a siren automatically shrieks and the offending compressor is shut down

Still more steam is added to the hydrogen and carbon monoxide mixture leaving the furnace, so in the second phase of the operation, known as conversion, hydrogen and carbon dioxide are made. These gases passing up through catalyst-filled trays in a tower maintained at a temperature of about 850° F. The equation here is $CO + H_2O = CO_2 + H_2$.

The gaseous mixture leaving the converter is composed of about 79 per cent hydrogen, 20 per cent carbon dioxide, and 1 per cent unconverted hydrocarbon and other gases. The gases are cooled by passing counter-currently to water in a coke-packed cooling tower, the water being circulated through an atmosphere cooler and then recycled. From the cooler the gases are led to hydrogen gas holders, where they are stored until needed, when the mixture is taken from the holder, led through a moisture trap and introduced into the compressor system.

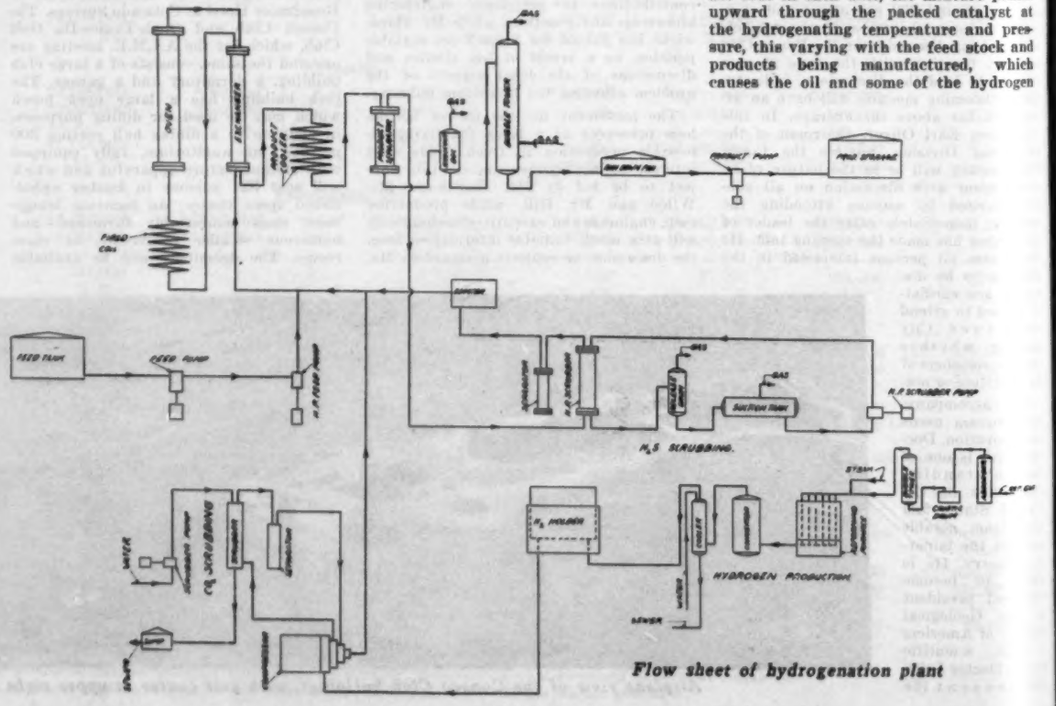
There are three electric and two steam driven units in the compressor house, the feature of which is a specially designed Ingersoll-Rand Imperial Type 10 four-stage compressor. The first two stages boost the pressure of the mixture to 200 pounds, the incoming flow then being led to scrubbing towers for removal of the carbon dioxide, and thence returned to the compressor and boosted to pressure of 3,600 pounds per square inch in the last two stages. The mixture is stripped of its CO_2 content by passing it through a packed scrubbing tower counter-current to sea water at a pressure of 240 pounds, this pressure causing the carbon dioxide to dissolve in the water and reducing the CO_2 content of the gas from about 20 per cent to less than 0.6 per cent.

Gas is supplied by the compressor system to the hydrogenating equipment, at the hydrogenating pressure of 3,600 pounds, at the rate necessary to maintain the desired reaction pressure.

Hydrogenation Operation

The feed stock to be hydrogenated is pumped from storage to high pressure feed pumps, and the charging stock and hydrogen, both at the same pressure, are finally brought together through a T connection and then are ready for the final step.

The oil-hydrogen mixture is first preheated in heat exchangers located inside the concrete stalls housing the furnaces, in which they pass counter-current to the hot hydrogenated products coming from the reaction chambers. The oil-gas mixture is then raised to the reaction temperature in a gas-fired coil quite similar to the conventional tube heaters. In the reaction chambers, of which there are four in each unit, the mixture passes upward through the packed catalyst at the hydrogenating temperature and pressure, this varying with the feed stock and products being manufactured, which causes the oil and some of the hydrogen



Flow sheet of hydrogenation plant

to unite. The reaction is exothermic, so that a relatively small amount of heat need be supplied by the fired coil.

The reaction products leave the top of the chambers and are led through the heat exchangers and a cooler to a release drum, where the gas and liquid are separated, the liquid being released into a low-pressure separator maintained at a pressure of approximately 200 pounds per square inch. Any gas remaining at this stage is drawn off and piped to the burning line, while the liquid products are scrubbed to remove hydrogen sulphide and pumped to storage.

Gases coming from the high-pressure release drum are led to an oil scrubber before being recirculated. As hydrogen has a tendency to become contaminated with unconverted hydrocarbons in the process, it is necessary to periodically wash these constituents out with oil.

View taken inside the stalls of the hydrogenation plant. Behind the 7-inch alloy steel walls of these 40-foot towers hydrogen and oil at 3,600 pounds pressure and 750° to 1,000° temperature are being forced through the packed catalyst

Gas coming from the top of the scrubber passes through a separator, and then goes to a booster pump where its pressure is raised to that maintained in the system before being returned to the hydrogenating equipment.

Safety Precautions

Owing to the extremely high operating temperatures maintained in the high pressure side of the plant, unusual precautions were taken in providing safety features in its construction. Construction of the Bayway unit (which involved an expenditure of $5,000,000) and that at Baton Rouge (which involved an expenditure of only some $3,000,000, due to the economies effected as a result of the building of the Bayway plant) necessitated the largest forgings of alloy steel ever fabricated in the United States. The reaction chambers, 40 feet high, have an inside diameter of 3 feet, with walls of special construction 7 inches thick. The walls of the chambers are not of one material only, but are made up in layers.

All of the piping in the high pressure side of the plant is of unusual thickness, with leak-proof joints effected by drawing two accurately machined ends together against an alloy steel gasket. The machining of the pipe ends and liners is so precise that even when the flange bolts are only hand tightened the joints will withstand the system pressure of 3,600 pounds per square inch.

Due to the extreme explosive range of hydrogen and air (oxygen) mixtures, the widest precautions have been taken to safeguard plant operations and operators. The hydrogen gas holder is fitted with both low and high pressure alarms, which sound in the control room whenever the rise of the holder becomes such that there is likelihood of an escape of hydrogen into the atmosphere, or of inward leakage of atmospheric oxygen. The oxygen content of the gas on the high pressure side of the plant is maintained at less than 0.2 per cent by means of a special recorder-alarm device, which is attached to the compressor discharge line. A small but representative sample of the gas is continuously removed from the line and passed through the recorder-alarm.

In this instrument the gas is washed and dried and passed through electrically heated porcelain tubes containing a platinum-black catalyst. The tubes are heated to a temperature of about 300° F., at which temperature and in the present of this catalyst, any oxygen present reacts with the hydrogen to form water. This reaction is highly exothermic, and an accurate thermocouple pyrometer records the temperature in the furnace and any increase in temperature due to the formation of water is immediately recorded on a scale graduated in per cent of oxygen. The electrical energy generated in the thermocouple by the heat of reaction actuates an electric alarm, which sounds in the control house. Whenever the oxygen content of the gas rises above 0.2 per cent maximum, the high pressure equipment concerned is immediately shut down and the cause of the trouble located and remedied.

An interesting "safety unit" at the hydrogenation plant (fortunately not called into action thus far) consists of two "'fraid towers" located at the end of the plant. These are designed to draw off gases, etc., in case of emergency, and burn them at the top of the towers to relieve the operating units of mixtures the presence of which would be dangerous in case of plant failure of any sort.

History of Hydrogenation

The history of hydrogenation as developed today goes back before 1912, when the work was originated by a Doctor Haber and perfected by Doctor Bosch of Heidelberg, Germany. These scientists found that by combining hydrogen under certain conditions with nitrogen from the air, nitrates for the manufacture of fertilizer and explosives at least equal to the natural product then imported from Chile could be produced. About the same time another German, Doctor Bergius, was directing his efforts toward combining hydrogen and coal by much the same methods, to form liquid hydrocarbons such as gasoline and oil.

Hydrogenation was extensively utilized in Germany during the World War for the production of nitrate for the manufacture of explosives, and when peace came the work was continued by I. G. Farbenindustrie Aktiengesellschaft. In 1926 development had progressed sufficiently to attract the attention of Standard of New Jersey and the following year the company signed an agreement with I.G. for mutual development of the process. A 100-bbl. experimental plant was built at Baton Rouge, and for two years the company's scientists worked on the problem of applying the process to petroleum.

In 1929 the construction of the first plant especially built for oil hydrogenation was started at Bayway, followed by a similar plant at Baton Rouge. For two years products were turned out under commercial operating conditions, with innumerable test runs to determine their cost and to develop improvements.

Control and operation of the hydrogenation process throughout the world is apportioned among the following companies, in the manner described:

I. G. Farbenindustrie, A.G.—For Germany.

Standard-I.G. Co.—Stock owned jointly by Standard Oil Co. (New Jersey) and I. G. Farbenindustrie A.G., with the former having the controlling interest. Receives all royalties on the process for the world outside of Germany.

International Hydrogenation Patents Co.—Controls all patents on the process for the world outside the United States and Germany, paying royalties to Standard-I.G.

International Hydro Engineering and Chemical Co.—Acts as expert consultant in engineering and chemical problems connected with the process for the world outside the United States and Germany. Also acts as agent for International Hydrogenation Patents Co.

Hydro Patents Co.—Controls all hydrogenation patents in the United States. Stock of this company was offered to all oil refiners of sufficient size to make them potential users of the process, and was accepted by more than 90 per cent of such companies, present stockholders comprising the following: Atlantic Refining Co., Barnsdall Corp., Consolidated Oil Co. (Sinclair Refining Co.), Continental Oil Co., Mid-Continent Petroleum Corp., Pure Oil Co., Richfield Oil Co. of California, Shell Union Oil Corp., Skelly Oil Co., Socony-Vacuum Corp., Standard Oil Co. of California, Standard Oil Co. of Indiana, Standard Oil Co. of Ohio, Standard Oil Development Co. (for Standard Oil Co. [New Jersey] interests, and The Texas Company.

Hydro Engineering & Chemical Co.—Acts as expert consultant on engineering and chemical problems connected with the process in the United States.

The past two years of full scale operations at the Bayway hydrogenation plant has developed a line of products which will be manufactured at the existing plants at Bayway and at Baton Rouge until future plants may be constructed. All of these products, experimental and commercial-scale operation has proven, can be produced on a price basis at least equal to that of products made by older refining methods.

Products Manufactured

The most important product of the hydrogenated line thus far, from the standpoint of the general public, is the new motor oil to be sold under the brand name of "Essolube." For the first time in the history of the petroleum industry the New Jersey company states, there has been produced a motor oil which satisfies all five requirements for a product capable of properly lubricating modern high compression engines. Other products developed include the following:

A line of hydrogenated solvents for use in the paint, varnish, lacquer, soap and textile industries, soon to be placed on the market.

A hydrogenated safety motor fuel for use in aircraft and motorboats, which will not catch fire accidentally like gasoline under normal temperature conditions. The Navy Department is now conducting experiments with this product.

A special aviation engine oil has also been produced by hydrogenation, and is undergoing extensive tests and will be shortly offered on the market. A substitute for benzol which has the blending characteristics of a 110-octane number naphtha, or higher than pure iso-octane. When marketed it will find its greatest use in the export trade, being used for antiknock blending purposes.

A superior kerosene. In connection with this product, it was learned that the demand for kerosene was so great at one time during the past year that the company was obliged to turn its Bayway hydrogenation plant over to the exclusive manufacture of kerosene for five straight months, supplementing the regular refinery output. Widespread growth in the use of range oil burners is believed to have been the major factor influencing this increase in kerosene demand.

Two forms of the catalyst used in the reaction towers. The first supply was used continuously 24 hours daily for more than a year before requiring treatment to restore its activity

Characteristics of Oils

"Essolube," however, is at the moment the major product of the Bayway plant. Pointing out that in the last 10 years the automobile engine has increased 22 per cent in speed and 50 per cent in power, without increasing in size, the company says that this has led to a demand not only for superior fuel but for an oil capable of giving proper lubrication in the modern automobile power plant. A satisfactory oil for use in today's high compression engines, it adds, should have the following five characteristics:

1. It must remain fluid at extremely

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Authoritative Details About Iraq Pipe Line Are Supplied by the Iraq Petroleum Company

In the current issue of The Naft, the magazine of the Anglo-Persian Oil Co., Ltd., there appears the following informative article dealing with the construction of the Iraq oil pipe line. The information in the article has been obtained from the Iraq Petroleum Co., Ltd., and the details now published may be taken as authoritative in every particular. The article follows:

Of all the industrial enterprises which have been developed in the years since the great war, there is probably none that has awakened greater interest in the press and public of two hemispheres than the Iraq Petroleum Co. As an international consortium of oil interests—British, Dutch, French and American— the enterprise presents a practical example of that international co-operation which, for several years past, it has been the cherished aim of the great leaders of the oil industry on both sides of the Atlantic to promote. But its attraction to the public is probably based more upon one item of its program than on anything else—the romantic fact that the company is to span the Syrian desert with a pipe line.

The line will run in duplicate from the oil field at Kirkuk to a point just west of the Euphrates River, where it bifurcates. Beginning at Hassar, approximately 1,000 feet above sea level, where the first pumping station will be situated, the route passes through the cultivated land of the Kirkuk plain in a southwesterly direction to Fatha Gorge, where it crosses the River Tigris, at about 400 feet above sea level. Since the river bed consists of rocky ridges, running diagonally, it is intended to lay the pipe in a trench, for which blasting will be necessary. The approaches to the River Tigris introduce the first difficulty which the pipe line will meet, for the neighboring country is rough on both sides of the river.

The transport of supplies and stores materials across the Tigris will be facilitated by the construction of a "Blondin" ferry, capable of carrying a 3½-ton load, and due to be in commission by the earlier half of 1933. This type of ferry consists of a conveyor running on a wire rope suspended across the river by means of a tower on each bank.

As a point of interest, it may be remarked that at Fatha during the season of low water, a small rival oil industry flourishes in the form of a native still, operated by a few Arabs, using oil obtained from seepages in the river bed. Fatha itself consists merely of a few ruins on the left bank of the river.

Most Important Railhead

Baiji, situated approximately 4 miles from the pipe line route, will be the most important railhead used by the company during the constructional period, and it is estimated that nearly half of the total tonnage of material involved in the pipe line construction will be handled there.

From the Tigris the line continues in a southwesterly direction, crossing two or three sandhills of loose, blown sand, and passing the site of the second pumping station at mile 66. At mile 95 the line crosses the Wadi Tharthar, a depression about 200 feet above sea level.

The Wadi Tharthar and the adjoining area present some difficulty, especially in winter, on account of 7 or 8 miles of salt marsh, alternating with gypsum. Thereafter the route continues on flat gypsum outcrops until within a few miles of the Euphrates River, the approaches to which are steep and rocky. Between Tharthar and Haditha on the Euphrates the gypsum rises to a summit of 750 feet above sea level.

The Euphrates will be crossed south of Haditha, at a point where the river bed, which is rocky and overlain with gravel, is most nearly level. This traverse is longer than the alternative island crossing which was considered, but is justified by the more level condition of the river bed.

As in the case of the Tigris crossing, the pipe will be trenched in the river bed, which will necessitate considerable blasting. A "Blondin" capable of taking a maximum load of 10 tons, will be erected across the Euphrates for the transport of pipe and miscellaneous stores.

The third pumping station—the last on the double line—is situated a little over a mile from the west bank of the Euphrates. Approximately 6 miles west of this point the line bifurcates.

Southern Section

The southern section of the line—all of which will traverse territory under British mandate—will pass through Rutbah and terminate at Haifa on the Mediterranean, a distance from Haditha of 467 miles. Over this section of line there will be five pumping stations.

For the first 20 miles after leaving Haditha the route to be followed by the southern section of the line—which continues in a southwesterly direction—is somewhat rough, but thereafter to Rutbah, where it rises to 2,000 feet above sea level, it is extremely good.

Before reaching Rutbah the line crosses the former main caravan route between Damascus and Hit, the track of which traverses the Wadi Hauran near Muhaiwir, where there is a police station and two small water wells.

Rutbah consists of a fort built by the Iraq government about six years ago, together with a landing ground for airplanes, a wireless station and rest house. It is the halfway point between Damascus and Bagdad and a place of call for motor and air transport on that journey.

Leaving Rutbah, the line takes a more westerly direction and passes over a flat desert, which gives place at times to rather rolling, stony country and a few small wadis. About 80 miles west of Rutbah is the Transjordan border, which has not yet been definitely delimited, and approximately 60 miles further on the line will strike the lava country—an area of unpleasant memories for many members of the Anglo-Persian Oil Co.'s staff who travelled by Nairn's temporary route through Jerusalem and Amman to Rutbah when the French experienced such serious trouble in the Jebel ed Druz during 1925-26.

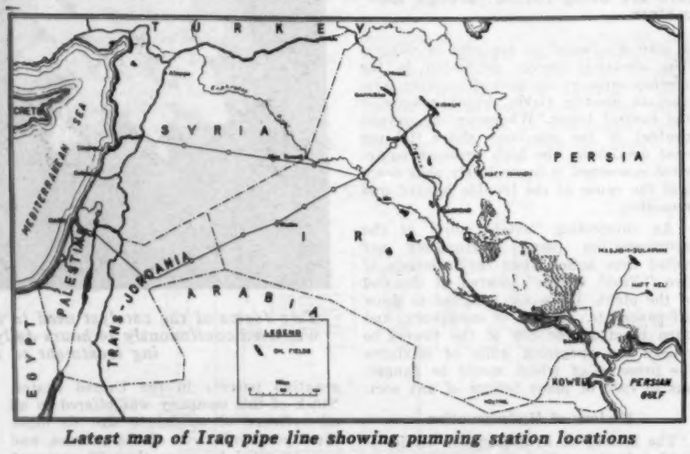
The lava country extends from Burqa, where there are the remains of large masonry reservoirs used to conserve water in former times, to Umm el Jimal, a distance of over 100 miles. Operation over this country presents one of the greatest difficulties in the construction of the pipe line. The lava is a basalt rock, appearing in some places as a solid sheet and in others as loose boulders, varying in size up to a cubic yard, with loose and abrasive soil beneath. Transport of pipe and essential supplies in this section will thus be a difficult problem, even when the boulders are removed from the track to be traversed.

The subsoil becomes firmer after leaving Jebel Asfar. At this point the line alters its direction, the route thereafter bearing approximately west-northwest for the remainder of its distance.

Over the stretch to Umm el Jimal there are no signs of any former occupation along the route, with the exception of two groups of stone buildings, which apparently are ancient shrines, or monuments of some description.

Before reaching Umm el Jimal the pipe line route crosses the southern slopes of the Jebel ed Druz Mountains. Umm el Jimal is a ruined town built entirely of lava blocks, and was at one time occupied by the Romans. Here again there are remains of masonry reservoirs used to conserve the rain water. The nearest wells, however, are from 5 to 6 miles to the north in the foothills.

From Umm el Jimal to Mafrak the country is flat, but rising as Mafrak is approached. Mafrak, on the Hedjaz Railway, consists of a railway siding and a few Arab dwellings. It is the railhead for the southern route and as such will have stores, workshops, sidings, etc. Unfortunately, there is no water at Mafrak, and it is proposed to pump supplies through a 3 or 4-inch line from a point on the Zerka River, near the village of Zerka, which is about 15 miles south of Mafrak.



Latest map of Iraq pipe line showing pumping station locations

Jordan River Crossing

After leaving Mafrak the route passes through limestone hills on the way to the River Jordan, rising to 2,600 feet above sea level after it passes Irbid, 18 miles east of the Jordan, and then falling very rapidly to the Jordan valley crossing at which point it is 850 feet below sea level. From Irbid it passes through populated districts, with numerous villages and much cultivation. It again rises rapidly, so that 10 miles west of the Jordan it is 750 feet above sea level. Thereafter it falls steadily through the valley of Esdraelon to the terminal site on the Bay of Acre. The site is located in the sand dunes approximately 2 miles to the northeast of the town of Haifa.

Haifa is a town of some 40,000 inhabitants and has cement, soap and tobacco industries. The construction of a harbor, started in 1929, is likely to increase its importance considerably. The main breakwater is practically completed, with the exception of the depositing of the large blocks for the protection of the side exposed to the sea. Dredging is well in hand and it is anticipated that ships will be able to make limited use of the harbor in the spring of 1933.

At present, buildings in Haifa are being used as offices, but later workshops, stores and a certain amount of office accommodation will be built on the terminal site. The railways will put in the necessary sidings, both at Mafrak and Haifa, to take care of construction needs. The company intends to drill for water in the sand dunes, where it is expected an adequate and suitable supply will be found.

French Section

The northern division of the line will be mainly within French Syria, and from the point of bifurcation at Haditha the route runs practically due west to Palmyra, and thence to the northern terminal at Tripoli, a distance of 381 miles. This section of line will have four pumping stations.

From Haditha the northern route proceeds more or less parallel with the River Euphrates for approximately the first 80 miles. Up to the point where it crosses the deep depression of the Wadi Rutka, which approximately marks the Syrian-Iraq frontier, the ground is generally rocky, with numerous ridges. The line passes close to the south of Palmyra (the ancient Tadmur), where it is at an elevation of 1,250 feet above sea level. Although there is a large water supply from underground streams in this area, this water is generally sulphurous and it is doubtful whether a sufficient quantity of suitable quality will be available from this source.

From Palmyra the line climbs steeply to 2,000 feet above sea level over a rocky saddle in the hills, and then rises more gradually until it eventually reaches 2,600 feet, the summit of this route, a few miles west of Furklus; thence the line runs through limestone hills, dropping into the valley of the Orontes, south of Homs, where its elevation above sea level is 1,600 feet. Homs is an important town, having several small industries as well as a considerable amount of agriculture. The railway which passes through the town links Damascus and Tripoli with Constantinople and Europe. Homs is the railhead for the northern section of the line and will be provided with the necessary workshops and sidings, the latter being now under construction.

Leaving the Homs area, the line passes near the village of Tel Kelah, a few miles south of one of the largest Crusader castles built in Palestine or Syria. It then crosses about 15 miles of lava country west of the Orontes valley and rises from 1,600 to 1,750 feet above sea level before dropping more or less steadily to the terminal site, some 4½ miles from the town of Tripoli and from its port, the small harbor of El Mina. (Tripoli itself is about 1½ miles inland.) For most of the last stage (from west of the Orontes) the line will run parallel with the road and railway.

The terminal site is on fairly steeply sloping ground, with a rocky outcropping over most of its area. Submarine loading lines will be used for loading tankers which will lie offshore. Construction material will be brought into the port of El Mina, where additional loading facilities are being built for the purpose.

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Miniature Distillation Operation at Refinery Gives Accurate Data on Commercial Operation

By R. C. CONINE
Chicago Bureau, The Oil and Gas Journal

The Pure Oil Co. at its Toledo, Ohio, refinery is using a miniature distillation unit in its laboratory testing work. The unit is used in making inexpensive tests which give accurate data as to what will be obtained in the operation of the refinery's commercial distillation equipment. The unit was designed by C. R. Wagner, chief chemist of the Pure Oil Co., and W. A. Peters of the W. B. Badger & Sons Co.

Briefly, the purpose of the laboratory distillation unit may be stated as follows: Examination of distillate and crude oils to determine gasoline and naphtha content and to check efficiency of fractionating columns to see how well bottoms have been stripped of their gasoline and naphtha content; to check topped crude and distillates in order to avoid taking over low octane gasoline from charging stock; where charging stock is introduced into the fractionating system for preheating purposes, it is necessary to get the straightrun fractions completely eliminated from the charging stock to avoid loss of octane number in the cracked gasoline; examination of straightrun gasolines to eliminate fractions of poor antiknock quality; by means of this laboratory unit the operator is able to determine the practicability of rearranging the components of cuts taken overhead, so that certain fractions now a part of the kerosene cut may be returned to the gasoline cut, while knocking components in the gasoline cut may be switched over to the kerosene or special naphtha cuts.

This unit has, in fact, practically eliminated the hard knocking heptanes from gasoline produced from a crude which is notoriously in disfavor as a source of motor fuels other than Diesel oil. Experimentally it has been found that certain components taken in the kerosene cut will not, when retained in the gasoline fraction, raise the endpoint of the motor fuel beyond 400° F. With this type of operation, the refiner has been able to increase his per cent gasoline recovery in straightrun distillation by 5 to 10 per cent. Some results, such as the straightrun recovery of 50 per cent 400° F. endpoint gasoline from a barrel of Cabin Creek crude oil, approach the phenomenal. The accompanying distillation tables indicate the close fractionation possible with the laboratory unit, and foreshadow the preparation on a commercial scale of solvent fractions of narrower distillation range than now considered practicable. The cuts taken frequently have a distillation range of 40° F., with 90 per cent distilling within a range of 15° to 20° F.

Packed Tower

The laboratory unit utilizes a packed tower (glass rings), and for this reason, as well as others, would not be copied without adaptations in a commercial unit, where, for instance, bubble cap trays would replace the glass rings in the tower as it is commonly known that a packed tower will not function beyond 12 inches diameter due to the difficulty in securing distribution of vapors and reflux. It is estimated that one bubble cap tray is equivalent to from 8 inches to 12 inches of packing. In the laboratory unit, the packed portion is 6 inches in diameter and 20 feet long. A space of 19 feet and 3 inches in this cylinder is packed with Du Pont soft glass rings. Above is a 4-foot dephlegmator head in which the temperature is controlled by regulating the flow of cooling liquid, water in this case.

(Continued on Page 31)

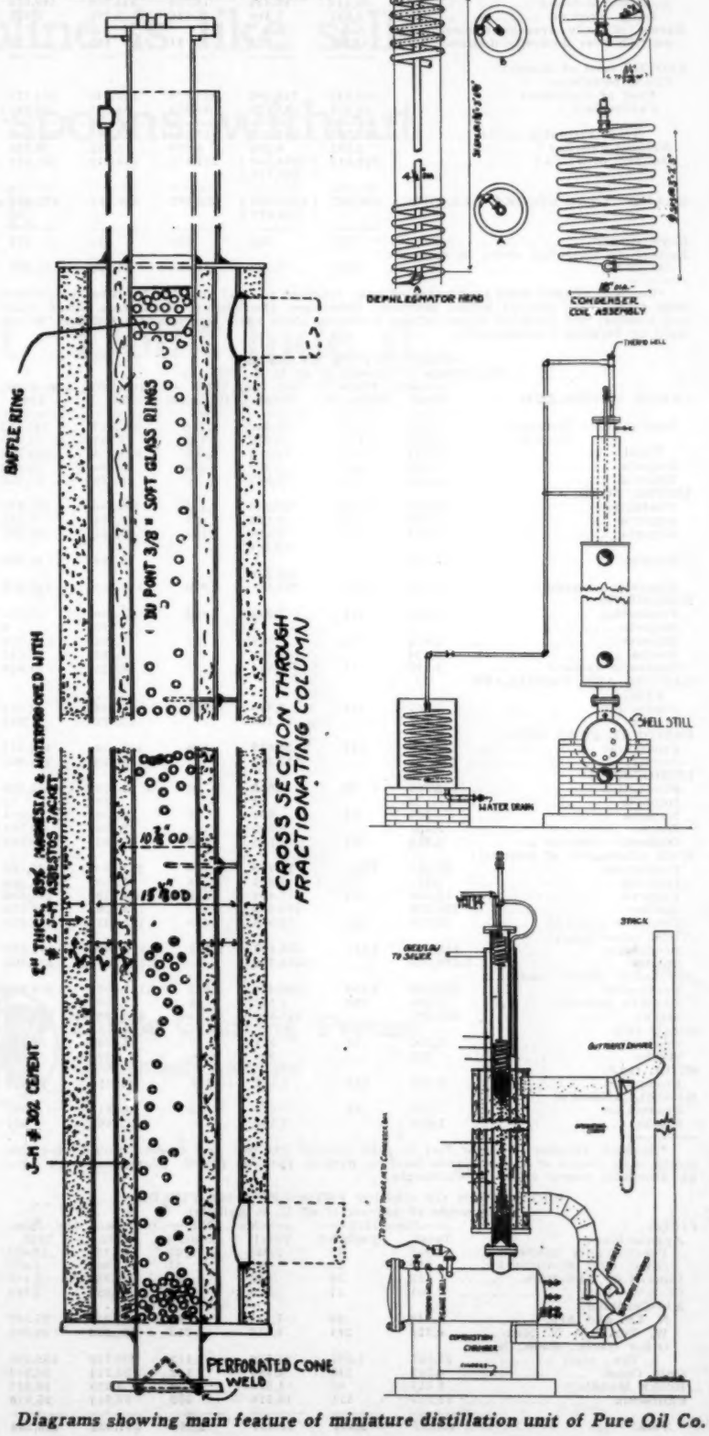
Still Run

	Cut number										
	1	2	3	4	5	6	7	8	9	10	11
Amount (gals.)	15	1	1	1	1	1	1	1	1	1	.1
Gravity	71.3	57.0	55.9	57.4	58.1	57.0	52.6	53.6	56.0	54.0	52.8
Initial	108	256	268	278	284	290	284	315	330	334	346
10 per cent	140	256	274	280	288	292	300	320	331	336	351
20 per cent	154	257	276	284	290	294	302	328	332	337	352
30 per cent	165	258	277	287	290	294	304	328	333	337	354
40 per cent	178	258	279	288	291	294	306	329	333	338	354
50 per cent	186	258	280	289	292	296	308	330	333	339	355
60 per cent	196	259	282	290	292	296	310	330	333	340	356
70 per cent	207	260	283	290	294	296	311	331	334	341	358
80 per cent	218	261	285	292	295	298	313	332	334	342	360
90 per cent	233	263	288	294	297	300	318	332	335	344	365
Endpoint	272	279	308	327	329	340	338	369	348	280	399
Recovery	98.0	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
Residue	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Loss	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

	Cut number										
	12	13	14	15	16	17	18	19	20	21	22
Amount (gals.)	1	1	1	1	1	1	1	1	1	1	1
Gravity	53.0	52.9	52.4	45.5	45.1	50.2	48.1	42.0	43.9	45.2	43.5
Initial	358	350	363	380	395	404	406	420	430	139	454
10 per cent	360	361	370	381	396	405	408	422	434	442	458
20 per cent	360	362	370	382	397	406	409	423	434	442	459
30 per cent	360	363	370	383	398	406	410	424	435	442	459
40 per cent	360	364	370	384	398	406	410	424	436	443	460
50 per cent	361	366	370	384	399	407	410	425	436	443	460
60 per cent	361	366	371	385	400	407	410	426	436	443	461
70 per cent	363	367	371	386	400	407	411	426	436	444	462
80 per cent	364	369	372	387	401	407	411	427	436	444	462
90 per cent	366	370	373	391	402	407	412	428	437	445	463
Endpoint	400	373	374	407	412	414	424	439	440	452	469
Recovery	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
Residue	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Loss	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

Still Data and Yields

	Still temp. °F.	Tower temp. °F.	Time Hours	Time Minutes	Per cent charging stock
Cut No. 1	350	250	9	0	37.5
Cut No. 2	354	252	0	30	2.5
Cut No. 3	364	276	0	30	2.5
Cut No. 4	372	280	0	15	2.5
Cut No. 5	372	280	0	15	2.5
Cut No. 6	384	290	0	15	2.5
Cut No. 7	384	290	0	15	2.5
Cut No. 8	406	294	0	30	2.5
Cut No. 9	400	290	0	30	2.5
Cut No. 10	418	300	0	30	2.5
Cut No. 11	426	310	0	30	2.5
Cut No. 12	440	340	0	30	2.5
Cut No. 13	450	360	0	30	2.5
Cut No. 14	456	370	0	30	2.5
Cut No. 15	460	380	2	0	2.5
Cut No. 16	470	392	0	50	2.5
Cut No. 17	490	412	0	40	2.5
Cut No. 18	494	422	0	35	2.5
Cut No. 19	512	428	1	25	2.5
Cut No. 20	530	446	0	55	2.5
Cut No. 21	534	452	0	55	2.5
Cut No. 22	554	468	0	50	2.5
Bottoms (3½ gals.)	...	...	..	..	6.75
Total	...	...	..	..	98.75
				Loss	1.25



Diagrams showing main feature of miniature distillation unit of Pure Oil Co.

Bureau of Mines Petroleum Statistics, Month of June, 1932

SUPPLY AND DEMAND OF ALL OILS
(Including wax, coke and asphalt in thousands of barrels of 42 U. S. gallons)

	June, 1932	May, 1932*	June, 1931	Jan.-June, 1932	Jan.-June, 1931
NEW SUPPLY:					
Domestic production	64,835	68,523	75,011	397,632	420,399
Crude petroleum	.....	.....	.....	.....	.....
Daily average	2,161	2,210	2,500	2,195	2,323
Natural gasoline	2,312	2,079	3,583	18,681	23,369
Benzol†	81	95	153	625	1,026
Total production	67,728	71,697	78,747	416,938	444,794
Daily average	2,258	2,313	2,625	2,290	2,457
Imports:					
Crude petroleum	7,869	5,089	3,978	32,244	25,509
Refined products	3,605	2,874	2,396	22,276	19,284
Total new supply, all oils	79,202	79,660	85,121	471,458	489,587
Daily average	2,640	2,570	2,837	2,590	2,705
Increase in stocks, all oils	§9,590	1,473	§3,970	§5,090	§13,765
DEMAND:					
Total demand	88,792	78,187	89,091	476,548	503,352
Daily average	2,960	2,522	2,970	2,618	2,781
Exports:					
Crude petroleum	2,791	2,942	2,544	14,179	11,853
Refined products	6,887	3,891	7,753	43,523	50,970
Domestic demand	79,114	66,354	78,794	418,846	440,529
Daily average	2,637	2,140	2,626	2,301	2,434
Excess of daily average domestic production over domestic demand	§379	173	§1	§11	33
STOCKS (end of month):					
Crude petroleum:					
East of California	322,845	325,302	353,374	322,845	353,374
California ‖	40,938	42,737	43,930	40,938	43,930
Total refinable crude	363,783	368,039	397,304	363,783	397,304
Natural gasoline	3,592	4,265	4,020	3,592	4,020
Refined products ‖	258,812	{¶264,651 / 263,773}	251,573	258,812	251,573
GRAND TOTAL STOCKS, ALL OILS	626,487	{¶636,955 / 636,077}	652,897	626,487	652,897
Days' supply	212	253	220	239	235
Bunker oil (included above in domestic demand)	3,714	3,242	4,053	20,058	23,215

*Revised. †Based upon production of coke reported to Coal Division by those by-product coke plants that recover benzol products. ‡Decrease. §Deficiency. ‖California heavy crude and residual fuel included under refined products. ¶New basis (see footnote * under "Stocks Held by Refining Companies").

COMPARATIVE ANALYSES
(Thousands of barrels of 42 U. S. gallons)

CRUDE PETROLEUM:	June, 1932 Total	June, 1932 Daily av.	May, 1932 Total	May, 1932 Daily av.	Jan.-June, 1932	Jan.-June, 1931
Runs to stills: Domestic	67,704	2,257	70,459	2,273	396,417	413,962
Foreign	4,623	154	4,210	136	22,741	24,659
Total	72,327	2,411	74,669	2,409	419,158	438,541
Imports	7,869	262	5,089	164	32,244	25,409
Exports	2,791	93	2,942	95	14,179	11,853
MOTOR FUEL:						
Production	33,996	1,133	*35,297	1,139	200,255	211,869
Imports	1,209	40	1,170	38	7,634	7,033
Exports	3,521	117	4,610	149	21,251	23,783
Stocks†	56,264	...	64,224 / 63,346	...	56,264	43,309
Domestic demand	38,766	1,292	*31,571	1,019	181,785	191,908
KEROSENE:						
Production	3,523	117	4,092	132	21,900	20,597
Imports	1	...	5	...	10	6
Exports	1,074	36	885	29	5,397	6,109
Stocks	5,134	...	4,812	...	5,134	6,521
Domestic demand	2,128	71	2,814	91	16,711	14,856
GAS OIL AND DISTILLATE FUELS:						
Production	5,207	174	5,890	190	35,143	43,484
Stocks	13,477	...	12,396	...	13,477	17,985
RESIDUAL FUEL OILS:						
Production	19,105	637	20,030	646	116,415	126,574
Stocks‖	118,412	...	117,177	...	118,412	115,968
LUBRICANTS:						
Production	2,290	76	2,036	66	12,258	13,433
Imports	3	...	1	...	11	18
Exports	725	24	832	27	3,928	4,084
Stocks	7,323	...	8,389	...	7,323	9,763
Domestic demand	3,054	102	1,535	50	10,603	10,550
WAX (thousands of pounds):						
Production	36,400	1,213	29,740	1,282	252,000	221,760
Imports	2,151	72	1,669	54	22,350	15,714
Exports	12,439	415	17,034	549	104,713	135,386
Stocks	198,526	...	194,973	...	198,526	200,836
Domestic demand	22,559	752	13,906	449	142,331	123,844
COKE (short tons):						
Production	145,100	4,837	159,400	5,142	835,100	1,006,600
Stocks	1,536,700	...	1,554,200	...	1,536,700	1,315,400
ASPHALT (short tons):						
Production	254,500	8,483	250,400	8,077	1,157,700	1,369,800
Imports (natural)	4,900	220	2,100	68	13,500	.....
Stocks	402,600	...	414,100	...	402,600	389,600
ROAD OIL:						
Production	1,223	41	581	19	2,589	1,729
Stocks	999	...	986	...	999	541
STILL GAS:						
Production	3,539	118	3,664	118	20,021	17,575
MISCELLANEOUS:						
Production	719	24	684	22	3,381	1,993
Stocks	1,046	...	1,156	...	1,046	687

*Revised. †Stocks of motor fuel in 1932 include terminal and transit stocks, pipe line stocks, and stocks of motor blends held at natural gasoline plants. ‡Compares with June 30. §Includes heavy crude in California.

PRODUCTION OF CRUDE PETROLEUM BY FIELDS
(Thousands of barrels of 42 U. S. gallons)

FIELD:	June, 1932 Total	June, 1932 Daily av.	May, 1932 Total	May, 1932 Daily av.	Jan.-June, 1932	Jan.-June, 1931
Appalachian:						
Pennsylvania grade	1,948	65	1,955	63	11,187	10,452
Other (inc. Kentucky)	690	23	666	21	3,953	4,370
Lima-N.W. Ind.-Mich.	613	20	662	21	3,489	2,148
Ill.-S.W. Ind.	501	17	526	17	3,039	2,780
Mid-Continent:						
N. La. and Ark.	1,848	62	1,941	63	10,947	15,337
W. Tex.-S.E. N. Mex.	6,339	211	6,613	213	39,223	49,001
Other (Okla., Kans., N. Tex., etc.)	33,187	1,105	34,626	1,119	201,120	199,289
Gulf Coast	4,209	140	4,388	142	24,714	30,983
Rocky Mountain	1,411	47	1,510	49	9,025	10,363
California	14,119	471	15,576	502	90,344	95,676
Total	64,835	2,161	68,523	2,210	397,632	420,399

PRODUCTION OF CRUDE PETROLEUM BY STATES
(Thousands of barrels of 42 U. S. gallons)

	June, 1932 Total	June, 1932 Dly. av.	May, 1932 Total	May, 1932 Dly. av.	Jan.-June, 1932	Jan.-June, 1931
Arkansas	993	33	1,067	35	5,998	8,368
California:						
Kettleman Hills	1,799	60	1,825	59	10,896	5,972
Long Beach	2,171	72	2,489	80	14,459	16,027
Santa Fe Springs	1,787	60	1,978	64	11,740	12,768
Rest of State	8,362	279	9,284	299	53,849	60,909
Total California	14,119	471	15,576	502	90,344	95,676
Colorado	98	3	103	4	643	789
Illinois	426	14	453	15	2,606	2,379
Indiana:						
Southwestern	75	3	73	2	424	401
Northeastern	3	.....	3	.....	17	21
Total Indiana	78	3	76	2	441	422
Kansas	2,736	91	2,935	95	17,123	18,869
Kentucky	535	18	511	16	3,032	3,242
Louisiana:						
Gulf Coast	909	30	1,066	35	5,545	4,765
Rest of State	855	29	874	28	4,949	6,969
Total Louisiana	1,764	59	1,940	63	10,494	11,734
Michigan	507	17	560	18	2,917	1,552
Montana	224	8	225	7	1,292	1,506
New Mexico	1,066	35	1,129	36	6,718	7,367
New York	308	10	312	10	1,838	1,579
Ohio:						
Central and Eastern	320	11	317	10	1,818	2,243
Northwestern	103	3	99	3	555	575
Total Ohio	423	14	416	13	2,373	2,818
Oklahoma:						
Oklahoma City	2,822	94	3,206	103	19,231	26,083
Seminole	3,501	117	3,780	122	22,514	27,436
Rest of State	6,582	219	6,668	215	37,870	45,919
Total Oklahoma	12,905	430	13,654	440	79,615	99,438
Pennsylvania	1,118	37	1,135	37	6,436	5,524
Tennessee	.....	.....	1	.....	3	4
Texas:						
Gulf Coast	3,300	110	3,322	107	19,169	26,218
West Texas	5,295	177	5,508	178	32,698	41,893
East Texas	10,340	345	10,693	345	61,117	32,292
Rest of State	7,186	239	7,404	239	43,266	48,690
Total Texas	26,121	871	26,927	869	156,250	149,093
West Virginia	357	12	345	11	2,013	2,230
Wyoming:						
Salt Creek	662	22	692	22	4,155	4,624
Rest of State	395	13	466	15	2,742	3,182
Total Wyoming	1,057	35	1,158	37	6,897	7,806
Total United States	64,835	2,161	68,523	2,210	397,632	420,399

GASOLINE PRODUCTION BY THE VARIOUS METHODS, JUNE, 1932
(Thousands of barrels of 42 U. S. gallons)

	Straightrun Total	Straightrun Per cent (*)	Straightrun Per cent (†)	Cracked Total	Cracked Per cent (*)	Cracked Per cent (†)	Nat. gasoline Total	Nat. gasoline Per cent (†)	Gasoline Total	Gasoline Pct. (*)
East Coast	2,640	18.1	45.6	3,125	21.6	53.9	27	0.5	5,792	39.6
Appalachian	729	24.7	51.6	659	22.3	46.6	26	1.8	1,414	47.0
Ind., Ill., etc.	2,077	23.4	43.6	2,580	29.1	54.1	109	2.3	4,766	52.5
Okla., Kans., Mo.	2,498	32.7	55.1	1,664	21.8	36.7	370	8.2	4,532	54.5
Inland Texas	1,508	34.0	61.0	748	16.9	30.3	214	8.7	2,470	50.9
Texas Gulf	2,670	19.8	45.8	2,849	21.2	48.8	315	5.4	5,834	41.6
Louisiana Gulf	666	20.7	42.7	784	24.3	50.3	110	7.0	1,560	45.0
Ark. and La., inland	305	18.3	43.5	326	19.5	46.4	71	10.1	702	37.8
Rocky Mountain	186	17.7	35.0	259	24.7	48.8	86	16.2	531	42.4
California	3,496	24.2	61.2	1,450	10.0	25.4	765	13.4	5,711	34.2
Total	16,775	23.2	50.3	14,444	20.0	43.4	2,093	6.3	33,312	43.2

*Per cent of crude run. †Per cent of total gasoline output.

RUNS TO STILLS AND OUTPUT OF REFINERIES, JUNE, 1932
(Thousands of barrels of 42 U. S. gallons)

INPUT—	Crude oil Domestic	Crude oil Foreign	Crude oil Total	Unfinished oils rerun	Natural gasoline	Total input
East Coast	10,466	4,110	14,576	357	27	14,960
Appalachian	2,955	....	2,955	235	26	3,216
Ind., Ill., Ky., etc.	8,863	....	8,863	380	109	9,352
Okla., Kans., Mo.	7,636	....	7,636	399	370	8,405
Texas Inland	4,435	....	4,435	143	214	4,792
Texas Gulf	13,044	404	13,448	487	315	14,250
Louisiana Gulf	3,111	109	3,220	150	110	3,480
Ark. and La. Inland	1,668	....	1,668	350	71	2,089
Rocky Mountain	1,050	....	1,050	198	86	1,334
California	14,476	....	13,476	742	*765	15,983
Total	67,704	4,623	72,327	3,411	2,093	77,861

OUTPUT—	Gasoline	Kerosene	Gas oil and distillate fuels	Residual fuel oils	Lubricants	Wax (thousands lbs.)
East Coast	5,792	515	781	4,115	662	14,280
Appalachian	1,414	270	106	242	407	6,440
Ind., Ill., Ky., etc.	4,766	323	495	875	225	4,200
Okla., Kans., Mo.	4,532	550	518	1,332	223	2,240
Texas Inland	2,470	201	173	1,381	27	...
Texas Gulf	5,834	696	1,176	2,988	482	3,360
Louisiana Gulf	1,560	264	302	895	26	7,000
Ark. and La. Inland	702	52	159	644	14	...
Rocky Mountain	531	39	61	330	28	—1,120
California	5,711	622	1,436	6,303	186	...
Total	33,312	3,523	5,207	19,105	2,290	36,400

OUTPUT (Cont'd.)—	Coke (tons)	Asphalt (tons)	Road oil	Still gas	Miscellaneous	Unfinished products	Shortage
East Coast	15,900	148,700	36	747	17	1,040	305
Appalachian	3,100	13,100	30	211	17	269	139
Ind., Ill., Ky., etc.	56,500	26,900	617	692	480	375	53
Okla., Kans., Mo.	22,700	2,900	126	304	133	192	355
Texas Inland	6,700	....	35	112	7	101	251
Texas Gulf	37,600	13,800	7	339	4	1,739	266
Louisiana Gulf	6,500	17,400	....	144	2	76	57
Ark. and La. Inland	200	4,900	38	45	25	292	99
Rocky Mountain	5,700	400	95	43	8	171	11
California	200	26,400	244	402	36	369	527
Total	145,100	254,500	1,228	3,539	719	4,614	2,054

*Includes 100,000 bbls. run through pipe lines.

(Continued on Next Page)

To sell Dubbs cracked gasoline as just gasoline is like selling solid silver spoons without the sterling mark

Boast about it Don't hide it

Universal Oil Products Co
Chicago, Illinois

Dubbs Cracking Process
Owner and Licensor

STOCKS OF CRUDE PETROLEUM
(Thousands of barrels of 42 U. S. gallons)

EAST OF CALIFORNIA:	June 30, 1932	May 31, 1932	June 30, 1931
At refineries by location:			
East Coast: Domestic	8,817	8,824	10,679
Foreign	11,016	9,613	3,811
Appalachian	2,178	2,292	2,296
Indiana, Illinois, Kentucky, Michigan	3,981	3,832	2,764
Oklahoma, Kansas and Missouri	5,461	5,285	5,613
Texas: Inland	1,640	1,372	1,611
Gulf Coast: Domestic	7,296	7,045	6,574
Foreign	302	567	195
Louisiana Gulf Coast: Domestic	2,539	2,181	4,891
Foreign	1,991	2,154	893
Arkansas and Inland Louisiana	473	402	735
Rocky Mountain	1,458	1,709	1,971
Total	47,403	45,277	41,734
At refineries by origin:			
Pennsylvania grade	2,042	2,056	2,158
Other Appalachian (inc. Kentucky)	829	797	745
Lima-N.E. Indiana-Michigan	204	185	194
Illinois-S.W. Indiana	106	116	124
N. Louisiana and Arkansas	1,561	1,196	2,914
West Texas and S.E. New Mexico	3,756	3,249	3,562
Oklahoma, Kansas, N. Texas, etc.	19,302	19,028	18,475
Gulf Coast: Grade A	1,562	1,373	2,334
Grade B	3,119	3,320	4,599
Rocky Mountain	1,593	1,623	2,019
California	....	....	5
Foreign	13,309	12,334	4,598
Total	47,403	45,277	41,734
Pipe line and tank farm:			
Pennsylvania grade	4,967	4,917	5,464
Other Appalachian (inc. Kentucky)	817	873	956
Lima-N.E. Indiana-Michigan	1,328	1,378	1,320
Illinois-S.W. Indiana	10,859	10,634	9,856
N. Louisiana and Arkansas	14,703	15,629	18,967
West Texas and S.E. New Mexico	30,909	31,916	38,756
Oklahoma, Kansas, N. Texas, etc.	167,022	170,124	191,023
Gulf Coast	13,807	14,010	15,850
Rocky Mountain	25,189	24,794	23,616
Total	269,592	274,275	305,808
Total refinery, pipe line and tank farm	316,995	319,552	347,542
Producers'	5,850	5,750	5,832
Total crude east of California	322,845	325,302	353,374
CALIFORNIA: Light	40,938	42,737	43,930
Total refinable crude in the United States	363,783	368,039	397,304

IMPORTS AND EXPORTS OF CRUDE PETROLEUM AND MAJOR REFINED PRODUCTS*
(Thousands of barrels of 42 U. S. gallons)

CRUDE PETROLEUM—	June, 1932	May, 1932	June, 1931	Jan.-June, 1932	Jan.-June, 1931
Imports	7,869	5,089	5,978	32,244	25,509
From Mexico	1,045	730	1,300	5,732	4,165
From Venezuela	4,545	3,460	1,543	18,110	13,550
From Colombia	2,180	660	611	7,468	6,891
From other countries	79	230	124	884	903
Exports:					
Domestic crude oil	2,791	2,942	2,544	14,179	11,853
To Canada	1,738	2,217	1,901	9,804	9,157
To other countries	1,053	725	643	4,372	2,696
Shipments	....	....	....	3	....
REFINED PRODUCTS:					
Gasoline:					
Imports	1,209	1,170	964	7,634	7,033
Exports†	3,521	4,610	3,264	21,251	23,783
To United Kingdom	987	2,078	1,197	7,112	7,838
To France	384	351	441	2,625	2,874
To Canada	236	184	223	1,051	1,445
To other countries	1,849	1,801	1,305	9,728	11,015
Shipments	65	196	98	735	611
Kerosene:					
Exports	1,074	888	741	5,397	6,109
To China	284	169	189	638	825
To United Kingdom	155	243	174	1,362	1,364
To other countries	675	445	378	3,298	3,830
Shipments	6	31	21	99	90
Gas oil and fuel oil:					
Imports	2,346	1,680	1,412	14,467	12,167
Exports	1,391	2,320	2,633	11,675	15,327
To Japan	385	752	536	3,006	2,793
To Chile	3	....	207	174	1,734
To other countries	979	1,368	1,718	7,179	9,231
Shipments	201	200	172	1,316	1,579
Lubricants:					
Exports	725	832	833	3,928	4,084
To United Kingdom	129	187	181	1,008	831
To France	149	145	103	570	672
To other countries	442	513	541	2,312	2,540
Shipments	5	7	8	38	41
Wax (thousands of lbs.):					
Imports	2,151	1,669	3,509	22,350	15,714
Exports	12,439	17,034	20,391	104,713	135,386
To United Kingdom	5,523	4,279	3,651	30,969	29,822
To Italy	1,517	1,394	1,272	14,376	24,607
To other countries	7,399	10,860	15,466	59,356	80,942
Shipments	....	1	2	12	15

*From the Bureau of Foreign and Domestic Commerce. †Includes benzol, 58 bbls. in June.

PRODUCTION AND DISTRIBUTION OF NATURAL GASOLINE
(Thousands of barrels of 42 U. S. Gallons)

	June, 1932 Total	June, 1932 Daily av.	May, 1932 Total	May, 1932 Daily av.	Jan.-June, 1932	Jan.-June, 1931
Production	2,812	94	3,079	99	18,681	23,369
Decrease in all stocks	373	12	75	3	....	....
Total	3,185	106	3,154	102	18,681	23,369
Blended at refineries	1,993	67	2,012	65	11,753	17,787
Blended at plants east of Calif.	3	...	3	...	20	82
Run through pipe lines in Calif.	100	3	112	4	555	496
Jobbers, exports, etc.	600	20	600	19	2,807	1,900
Increase in all stocks	....	...	....	...	1,074	920
Balance	489	16	427	14	2,361	2,174
Total	3,185	106	3,154	102	18,681	23,369

PRODUCTION OF MOTOR FUEL
(Thousands of barrels of 42 U. S. Gallons)

	June, 1932 Total	June, 1932 Daily. av.	May, 1932* Total	May, 1932* Daily. av.	Jan.-June, 1932	Jan.-June, 1931
Straightrun gasoline	16,775	559	17,335	541	100,470	105,559
Cracked gasoline	14,444	481	15,090	487	83,914	84,009
Natural gasoline:						
Blended at refineries	1,993	67	2,012	65	11,753	17,787
Blended at plants†	3	....	3	....	20	82
Run through pipe lines‡	100	3	112	4	555	496
Jobbers, exports, etc.	600	20	600	19	2,807	1,900
Benzol produced	81	3	95	3	475	1,026
Total motor fuel	33,996	1,133	35,397	1,139	200,255	211,869

*Revised. †East of California. ‡To refineries in California.

INDICATED DOMESTIC DEMAND FOR CRUDE PETROLEUM EAST OF CALIFORNIA
(Thousands of barrels of 42 U. S. gallons)

Domestic petroleum by fields of origin:	June, 1932 Total	June, 1932 Daily av.	May, 1932 Total	May, 1932 Daily av.	Jan.-June, 1932	Jan.-June, 1931
Appalachian:						
Pennsylvania grade	1,902	63	1,822	59	10,784	10,734
Other (inc. Kentucky)	714	24	674	22	4,135	4,365
Lima-N.E. Ind.-Mich.	641	21	837	27	3,775	2,184
Ill.-S.W. Ind.	288	10	393	13	1,985	3,140
Mid-Continent:						
N. La. and Ark.	2,411	80	2,081	67	13,418	17,938
W. Tex.-S.E. N. Mex.	6,818	227	8,144	263	43,233	57,411
Other (Okla., Kans., N. Tex., etc.)	35,891	1,197	39,043	1,259	212,328	199,606
Gulf Coast	4,422	148	4,474	144	24,553	33,597
Rocky Mountain	1,061	35	1,228	39	7,302	11,603
California	....	....	....	....	....	....
Total demand	54,148	1,805	58,696	1,893	321,463	340,578
Exports	2,050	68	2,095	68	9,103	7,816
Domestic demand	52,098	1,737	56,601	1,825	312,360	332,762
Foreign petroleum	6,894	230	2,757	89	23,429	24,764
Total domestic demand east of California	58,992	1,967	59,358	1,914	335,789	357,526

RECORD OF WELLS FOR IMPORTANT FLUSH FIELDS, JUNE, 1932*

	Completions Oil	Completions Gas	Completions Dry	Total initial production (bbls.)	Average initial production (bbls.)	Drilling June 30
Texas	755	11	164	1,595,100	2,100	942
East Texas†	624	..	9	1,560,000	2,500	359
Gulf Coast	25	2	23	14,300	600	104
West Texas	13	1	8	1,800	100	92
California	17	..	24	15,600	900	108
Kettleman Hills	2	..	1	8,300	4,200	13
Long Beach	2	..	6	200	100	4
Playa Del Rey	..	..	..	....	....	2
Oklahoma	41	5	28	30,600	700	335
Oklahoma County	7	..	..	21,800	3,100	61
Pottawatomie Co. / Seminole County	10	..	1	5,300	500	28
New Mexico	2	..	1	6,500	3,300	48
Lea County (Hobbs)	2	..	..	6,500	3,300	4
Other states	178	50	108	32,100	200	916
Total United States	993	66	325	1,679,900	1,700	2,349

*From The Oil and Gas Journal and California office of the American Petroleum Institute. †Initial production for the East Texas Field calculated from field reports.

STOCKS HELD BY REFINING COMPANIES, JUNE 30, 1932
(Thousands of barrels of 42 U. S. gallons)

	Gasoline At refineries	Gasoline At bulk terminals	Gasoline Total	Kerosene	Gas oil and distillate fuels	Residual fuel oils
East Coast	6,260	*11,492	17,752	1,020	2,129	5,016
Appalachian	1,530	535	2,065	232	550	455
Ind., Ill., Ky., etc.	4,979	2,349	7,328	543	1,417	2,900
Okla., Kans., Mo.	2,916	1,165	4,081	364	1,374	2,654
Texas Inland	1,915	79	1,994	148	510	3,211
Texas Gulf	4,411	452	4,863	1,185	1,775	5,775
Louisiana Gulf	1,551	443	1,994	207	748	3,774
Ark. & La. Inland	168	132	300	17	155	616
Rocky Mountain	1,818	.....	1,818	233	241	406
California	12,978	(†)	12,978	1,185	4,578	‡93,605
Total	38,526	*16,647	55,173	5,134	13,477	118,412

	Wax (thousands of pounds) Lubricants	Crude scale	Refined	Total	Coke (tons)
East Coast	2,390	28,940	29,280	58,220	27,400
Appalachian	821	17,206	3,811	21,017	6,600
Ind., Ill., Ky., etc.	737	23,098	2,145	25,243	191,300
Okla., Kans., Mo.	511	3,766	2,286	6,052	184,800
Texas Inland	70	.....	307	307	151,500
Texas Gulf	1,662	3,321	13,400	16,721	615,400
Louisiana Gulf	58	36,054	1,447	37,501	115,200
Ark. & La. Inland	17	.....	.....	.....	100
Rocky Mountain	206	32,104	1,361	33,465	139,100
California	851	.....	.....	.....	105,300
Total	7,323	144,489	54,037	198,526	1,536,700

	Asphalt (tons)	Road oil	Miscellaneous products	Unfinished oils	Natural gasoline
East Coast	156,500	27	90	8,833	44
Appalachian	33,400	66	34	1,547	2
Ind., Ill., Ky., etc.	77,300	195	614	6,259	28
Okla., Kans., Mo.	3,800	207	65	3,065	16
Texas Inland	...	17	7	1,185	7
Texas Gulf	9,200	10	8	11,651	260
Louisiana Gulf	47,200	.....	6	1,997	9
Ark. & La. Inland	26,400	9	9	651	7
Rocky Mountain	3,300	190	40	1,804	4
California	51,500	278	173	§8,372	2,703
Total	408,600	999	1,046	45,364	3,080

*Comparable figures for May 31: East Coast, 11,730,000 bbls.; United States, 16,834,000 bbls. These changes caused by inventory adjustments. †Included with "at refineries." ‡Includes heavy crude. §Includes 4,732,000 bbls. tops.

SHIPMENTS OF MOTOR FUEL BY PIPE LINES
(Thousands of barrels of 42 U. S. Gallons)

	June, 1932	May, 1932	June, 1931	Jan.-June, 1932	Jan.-June, 1931
Motor fuel turned into lines	2,713	2,656	1,161	14,093	3,676
Motor fuel delivered from lines	2,879	2,671	713	13,941	2,636
Shortage	9	1	13	28	5
Stocks in lines and working tanks end of month	1,086	1,261	1,235	1,086	1,235

SHIPMENTS FROM CALIFORNIA TO EASTERN PORTS IN THE UNITED STATES*
(Thousands of barrels of 42 U. S. gallons)

	June, 1932	May, 1932	June, 1931	Jan.-June, 1932	Jan.-June, 1931
Gasoline	1,340	928	1,234	4,533	7,490
Natural gasoline	72	72	...	217	805
Kerosene	50	...	48	131	136
Gas oil and Diesel oil	111	80	95	379	1,033
Fuel oil	...	...	...	...	2
Lubricants	...	...	15	19	53
Asphalt	1	1	2	5	10
Miscellaneous	14	23	...	40	...
Total	1,588	1,104	1,394	5,324	9,529

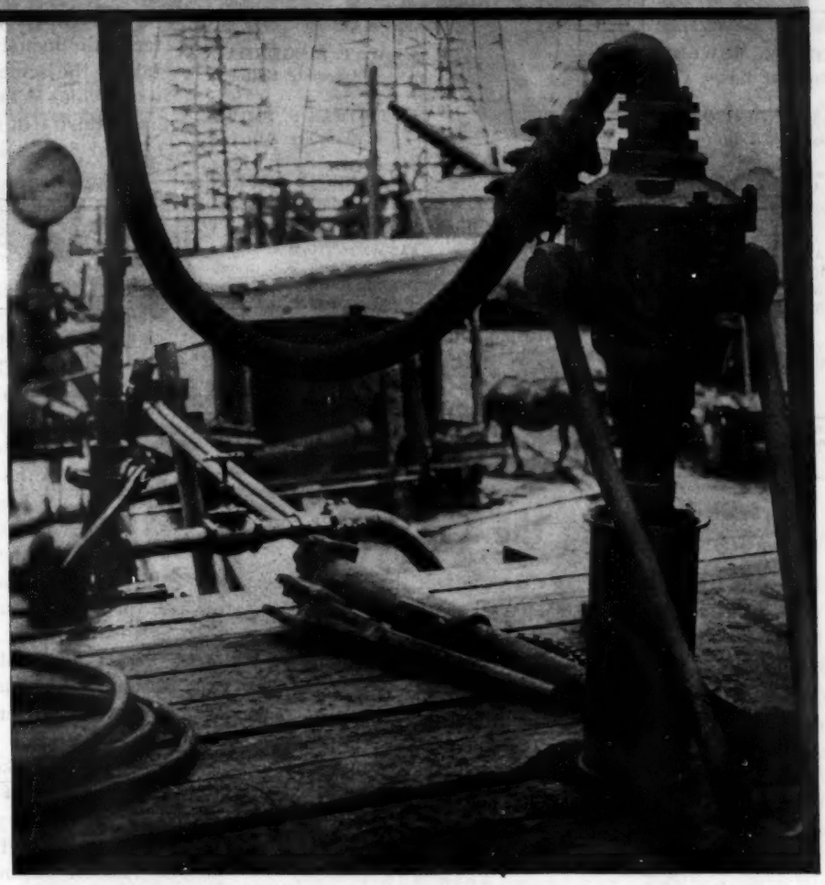
*Compiled by E. T. Knudsen of the San Francisco office of the Bureau of Mines.

NUMBER OF WELLS COMPLETED IN THE UNITED STATES*

	June, 1932	May, 1932	June, 1931	Jan.-June, 1932	Jan.-June, 1931
Oil	993	968	643	4,642	2,980
Gas	66	77	179	535	1,111
Dry	325	269	294	1,571	2,261
Total	1,384	1,314	1,116	6,751	6,352

*From The Oil and Gas Journal and California office of the American Petroleum Institute.

BRING ON YOUR HIGH PRESSURE!



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Nearing the Goal

Nothing is more obvious today than the fact that if producers will hold crude output down to 2,000,000 barrels daily in the United States, the oil business will be stabilized, regardless of what refiners may do, says President Amos L. Beaty of the American Petroleum Institute.

The Oil and Gas Journal is glad to have this official confirmation of the view expressed in these columns that "if the producer will curtail his production to about 2,000,000 barrels daily the industry can have a fairly prosperous season. The industry can, within reason, write its own ticket if it cuts its overproduction."

"If proration is a good thing, why not go the limit?"

On June 23 The Oil and Gas Journal said editorially that "the desirability of reducing stocks is admitted but when the producers are making sacrifices and incurring losses in aiding the curtailment program it would ease the situation to have an exact understanding on withdrawals and their effect on the producers' outlet. Too much stress is being placed upon the necessity for withdrawals from storage with the result that producers find it difficult to dispose of their oil."

On this point it is interesting to find President Beaty saying in his current message to the industry that "some liquidation of stocks is logical and reasonable, but the process should be gradual. It should not be so pronounced or extreme as unduly to reduce crude purchases —backing up oil in the fields—and thus demoralize the producing business."

Companies having large stocks of stored oil, he adds, "should consider the state of the industry as well as their own individual situations. Fairness and broad vision are all that is demanded."

This official endorsement by the president of the American Petroleum Institute is welcomed as adding weight to the conclusions already advanced in these columns.

Turning to consumption and President Beaty's prediction of a 15 per cent decrease during the closing nine months of the year, he says that "nothing would please me better than to be proved a false prophet" but calls attention to a decrease of 12.9 per cent in domestic demand during May from May of last year and of 12.2 per cent decrease in combined domestic demand and exports.

The economics committee of the institute estimated the decline for the last nine months of the year at 6.3 per cent in domestic demand and 9.1 in combined domestic and export output.

It is well to note that the latest Bureau of Mines report shows a greater refinery demand during June than a year ago. Although this in part may be due to the rushing of shipments from refineries before June 21 when the new revenue law took effect, it would seem to indicate that consumption during June was much nearer normal than in May.

Domestic demand for the first six months of the year was only 5.3 per cent less than in the same period last year. Exports were 10.6 per cent less; the combined domestic and export consumption decline being only 5.8 per cent.

Nevertheless, whether Mr. Beaty or the committee is nearer the facts, the industry, he says, is in a fortunate position comparatively, taking the same view as The Oil and Gas Journal in its January 28 issue which asked, "What other major industry can match the gasoline industry in maintained volume of consumption in the midst of a general depression?"

"How many other businesses in the country," The Journal said, "would think themselves back in prosperity if their sales for the balance of the year promised to be even 25 per cent below their former peak?"

President Beaty in his current message says: "What would the steel industry give to have a demand equal to 85 per cent of that which it enjoyed in 1929? What would the railroads of the country give to have back 85 per cent of their traffic and revenues for 1929? How happy would be any other major industry of the country with 85 per cent of 1929 volume?"

The volume we have is sufficient, President Beaty says, "to produce fair profits—even in these times—if operations are conducted on a rational basis."

The essentials for a rational basis have been indicated. Crude production should be cut to 2,000,000 barrels daily. Companies with large stocks of stored oil should consider the state of the industry as well as their individual situations, and withdrawals should not be so large as to demoralize the producing business.

Further, as Mr. Beaty suggests, "the stronger companies should not plan to produce their entire requirements but should reserve some purchasing power to take care of distress products which may come on the market."

There is market enough for all if we are able to restrain inherent "hoggishness," if we are able to convince everyone in the business that in an industry, as in any other organization, it is a case of "united we stand, divided we fall."

The oil business can thrive and prosper even on the lessened demand if it will order its operations accordingly. The general depression has not hit the oil business one-quarter as much as most other large industries.

What backsets the oil business has had, have been of its own making—through producing more crude and more products than there was any possibility of selling at a fair price.

Just now the industry should be figuring on how it is going to enter the season of lessened consumption—with an overhanging surplus or with merely essential working stocks.

The decrease in consumption will make it all the more important this year to keep a tight rein on operations from now on.

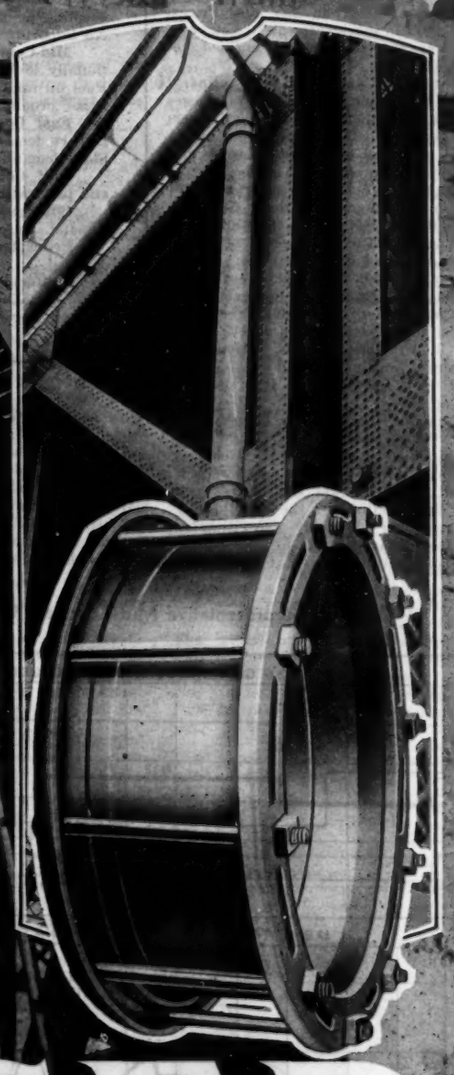
Reduction of crude output to 2,000,000 barrels will help greatly by removing the temptation of overproduced oil to increase manufacturing operations.

We are so near the mark and have curtailed so much that it should be comparatively easy to make whatever further effort is needed to reach it.

But it cannot be realized until the individual units in the industry feel that their individual success is bound up with the general progress of the business and that they cannot attain the one without the other.

The lamentable results of overproduction of crude or refined products have been familiar to all. The stabilizing effects of curtailing production to demand have been plain enough for everyone to see.

The Standard Type of Construction for the MODERN BRIDGE LINE



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Fuels Continue Strong in Refined Oil Markets, With Lower Quotations in Motor Fuels

By C. O. WILLSON

With the exception of gasolines the refinery market in Oklahoma (Group 3) during the past week showed a distinct trend toward either firm or higher prices. All products used as furnace oils and tractor fuels again advanced with most of the refiners continuing their policy of refusing to sell. The strength in these products brought an advancing market in kerosene and some of the heavier grades of industrial fuels and gas oils. Prices on Oklahoma lubricants and wax are firm although business is confined to routine orders.

Quotations on most grades of refinery gasoline and naphtha and natural gasolines are fractionally lower than they were a week ago. Despite this fact many refiners the first of the week were encouraged by the showing made by the refinery tank car market under the unfavorable conditions prevailing. Starting the middle of last week the tank car market was faced with the problem of absorbing several hundred cars of U. S. Motor dumped on the market overnight by a Kansas refiner. This material was offered by resellers all through the Middle West on a basis of 4 and 4⅛ cents Group 3. Previous to this action, the spot market was active and it appeared that prices might stiffen before the end of the month.

Some of the Kansas material was withdrawn from the market later in the week but it supplied the August requirements of several important buyers and was still a factor in the market early this week due to the reselling of the gasoline by marketers. On Tuesday specification U. S. Motor gasoline of the low octane grade was generally quoted at 4⅛ to 4¼ cents for resale in Oklahoma and 4⅜ cents was the low of the market to the trade. The manner in which the tank car market absorbed the unexpected dumping of gasoline last week has caused many of the trade to believe that the market basically is stronger than many had believed earlier in the month.

Those who have been pessimistic regarding the refinery tank car market do not lack developments to which they can point, to substantiate their position.

The larger gasoline stocks of Mid-Continent refineries, when compared to a year ago, the competition of cheap low vapor pressure natural gasolines, the unsettled tank wagon and retail market situation, and the supposed increase in crude oil production available under the posted schedules in Mid-Continent Fields, are situations pointed to by those who look for lower rather than higher quotations at refineries. In the tank wagon and retail end, price war conditions prevail in some of the larger consuming centers served by Mid-Continent refiners. The third grade usually is being used by the major distributors to fight the competition coming from price-cut operators who center their sales efforts on one grade. In some cases, the third grade price is 5 or more cents per gallon under the regular grade. With these wider spreads, the volume of third grade business naturally increases at the expense of the regular and premium grades. This cuts directly into the revenue of station operations and to regain this volume, some distributors have found it expedient to reduce their regular and premium grades and the fear is expressed that this action will be followed generally throughout the Middle West. Lowering the schedules on the regular grade would be reflected in lower prices on many of the contracts between refiners and jobbers and it is assumed that in turn this would result in lower tank car prices. If later developments should show that the tank car prices will not go lower regardless of what happens in the retail end, the industry in the Mid-Continent and Middle West will have the groundwork for remedying marketing conditions which are the principal worry of many companies.

Refined Market Barometer

Improvement in the price situation for all grades of fuel oils at interior points was the outstanding feature of the refinery tank car market over the past week. The approach of the furnace oil consuming season finds refiners with low storage of these oils and reduced current output. Prices have advanced rapidly. Some improvement is also noted in the heavy fuels with more inquiries from industrial consumers. The refinery gasoline market situation was mixed with weakness apparent in the Mid-Continent. Natural gasoline prices lower in the Mid-Continent. Kerosene demand more active. No important changes in lubricants.

Mid-Continent—Prices on refinery gasolines and natural gasolines fractionally lower. Heavy demand for all grades of furnace and prices higher. Fuel oil and gas oil stronger. Kerosene prices advanced by several refiners. Other products unchanged.

East Coast—Heavy seasonal demand for gasoline in domestic market. Export demand quiet. Furnace oils active. Good movement of bunker fuels. Slow demand for lubricants. Little new business in wax.

Gulf Coast—More active demand points to higher prices in gasoline and lubricating oils.

Chicago—All grades of fuels and gas oils advance rapidly due to active demand. Gasoline market unsettled.

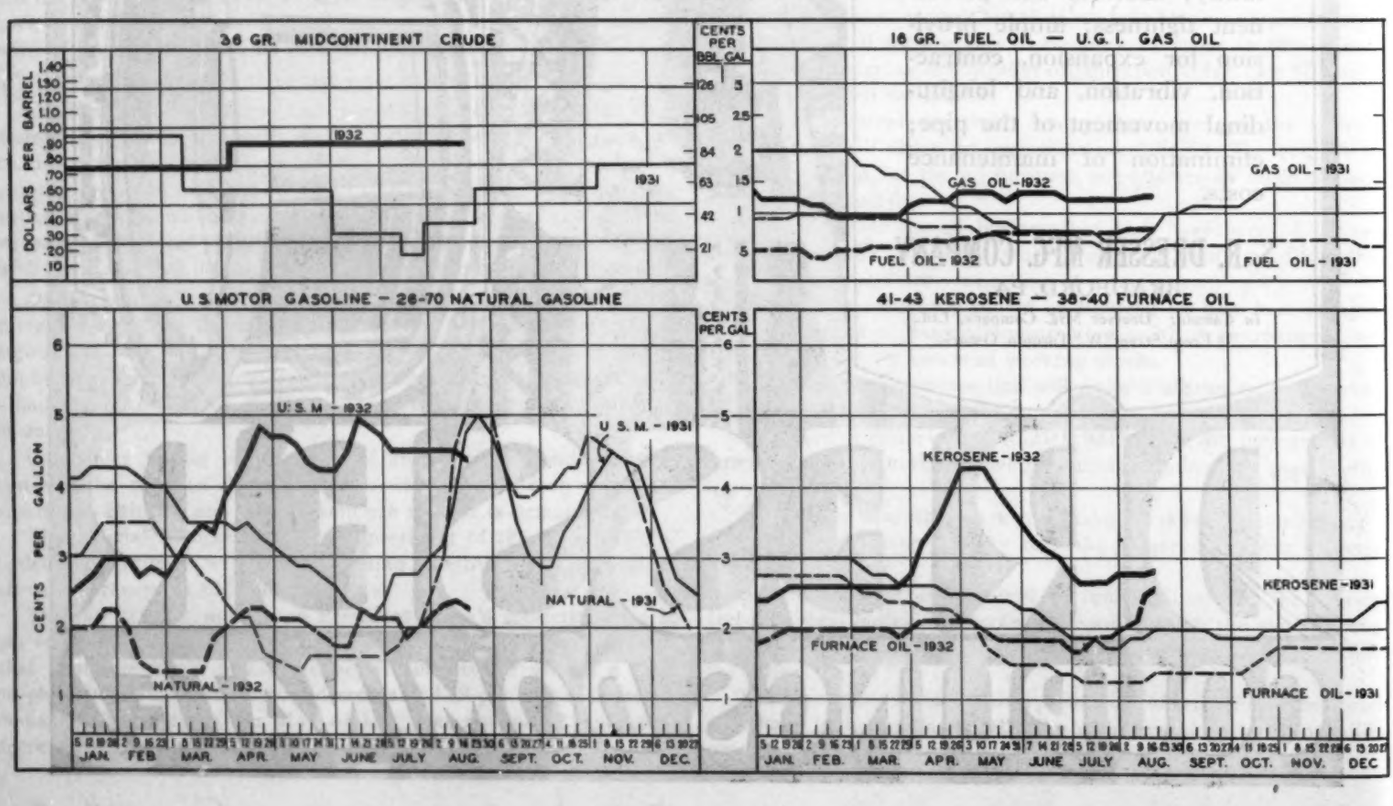
Pennsylvania—Good movement of gasoline and kerosene. Prices unchanged.

California—Domestic gasoline market disturbed by reports that Gulf Coast gasoline is being brought to West Coast buyers by water. Gasoline demand heavy. No change in fuels.

Spread of Bootlegging

In this connection one refiner who has made a study of this situation says the main trouble in retail markets is the competition of the bootlegger. He claims that considerable quantities of crude oil are being refined in the Mid-Continent for

Representative Mid-Continent Quotations on Crude Oil and Refined Products Basis Oklahoma (Group 3)



which the posted prices are not being paid. This is crude oil being produced in violation of proration orders. He further states that the gasoline from this crude is being sold to jobbers who are evading all or part of the state gasoline taxes. It is apparent that under such conditions the retail could undersell the legitimate distributors from 2 to 5 cents a gallon and still have sufficient profits for the jobbers and the refiners who furnished the gasoline. This refiner says that while the volume of this bootleg material is relatively small, one bootlegger in a medium sized city can upset the market structure of all other operators.

Other refiners believe the significance of all types of bootlegging in markets is being exaggerated among distributors. One operator says the blame lies with legitimate distributors—both large and small—who are endeavoring by various price cutting tactics to maintain last year's gallonage in the face of the fact that actual consumption in most areas is substantially less. Regardless of the cause the effect in the tank car is apparent. Jobbers faced with low priced competition are constantly seeking concessions from refiners in spot sales and also in contract adjustments.

The continued strength shown in the other light oil and heavy oil fractions of crude oil is highly encouraging to refiners. As has been pointed out in these columns previously, the advance in fuels if continued is certain to aid the gasoline market. All refinery cuts sold as fuel oil regardless of grade are potential charging stock for the cracking operations of refineries and if prices on these cuts are advanced to the point where refiners can afford to sell them to fuel buyers rather than use them in their plant operations as raw material, it will have a tendency to curtail gasoline yields during the fall and winter months when such curtailment will be highly beneficial to markets.

Gasoline and Naphtha

The low on low octane U. S. Motor gasoline is reduced from 4½ to 4⅜ cents in this week's market tables for Oklahoma. The same differentials for the higher octane grades are being maintained. The Kansas refiner previously mentioned is reported to have dumped the gasoline due to the fact that the company has excess material on hand which it desires to sell before the end of the main gasoline consuming season. There are a few other refiners who have stocks which they would like to liquidate within the next 30 days but so far they have not been a bearish factor in the market. The lowest prices in the current market are coming from refiners who sell their output from week to week and their inventories are insignificant.

There are many inquiries for naphthas. Grades of from 437 to 450 endpoint with other desirable properties will usually bring premiums over low octane U. S. Motor. One large refiner, quoting 5 cents on a 440 naphtha, is making spot sales on that basis.

One refiner who serves a northern trade reports inquiries for 375 and 360 endpoint gasoline to be shipped during the fall and winter months. The competition of low vapor pressure natural gasolines is expected to be more of a factor in this high gravity and low endpoint business during the coming winter. Unless relative prices change, the natural gasoline manufacturer is in a much better position to secure this business than the refiner. Present quotations on the high gravity refinery gasolines are largely nominal.

Kerosene and Furnace Oils

The 41-43 water white kerosene has been advanced to a low of 2⅞ cents in Oklahoma with several refiners quoting up to 3¼ cents. The 42-44 grade meeting all the usual specifications is scarce at a low of 3⅛ cents. The demand for kerosene has not improved materially and some resale material was available the first of the week at 2¾ cents. The advance is due to the rapid advance in all grades of distillates.

The low on a prime white distillate suitable for furnace oil or tractor fuel is now 2¾ cents and 38-40 straw distillate of low cold test has buyers at a low of 2⅝ cents. The market is being flooded with so many inquiries for furnace oil material that a few refiners have advanced their quotations to 3 cents, which is the same as their quotation for 41-43 kerosene. So far, the higher distillate prices have not caused refiners to increase the quantity of material offered.

The 28-30 grade of fuel oil of low cold test jumped to a low of 65 cents in the Oklahoma market last week. The half dozen refiners in Oklahoma who make this material are sold up. U.G.I. gas oil is firm at a low of 1⅜ cents with cracking stock in demand at a low of 1½ cents.

Natural Gasoline

Quotations on most grades of natural gasoline are one-eighth cent lower than last week both in Oklahoma and Texas. Orders have not been sufficient to support an advancing market hoped for by the manufacturers earlier in the month and sellers were unable to maintain last week's quotations.

Additional Ruling on Revenue Tax Collections

By CHAS. E. KERN

Washington Bureau, The Oil and Gas Journal

WASHINGTON, D. C., Aug. 15.—To clarify the tax on lubricating oil the Bureau of Internal Revenue has made public the following letter:

The questions presented are as follows:

"The H company sells lubricating oil to certain manufacturers of automobiles and bodies, which are taxable articles. (1) Is such oil used by the manufacturers on their own machinery taxable? (2) Is such oil placed in and sold with such taxable articles itself taxable under Section 620?

"You are advised that lubricating oil may not be sold tax free in accordance with the provisions of Section 620 of the Revenue Act of 1932 unless such oil is sold for use as a material in the manufacture or production of or for use as a component part of a taxable article to be manufactured or produced by the vendee.

"Lubricating oil sold to manufacturers of automobile bodies and chassis to be used in the operation of machinery or for other lubricating purposes may not be sold tax free under the provisions of Section 620 of the Revenue Act of 1932."

Other informal rulings by the Bureau of Internal Revenue applicable to transactions in the oil industry follow:

"Reference is made to your letter of July 16, 1932, in which you protest against the conclusion reached by the Treasury Department that manufacturers of toilet preparations must pay the taxes due thereon at the time when the sale is made instead of waiting until the money is received by them.

"The law imposes the tax upon the sale by the manufacturer, producer or importer. The Treasury Department has uniformly held that it is immaterial in the collection of this tax whether the articles are paid for in cash or are sold on credit but that in either event the tax is due and must be paid at the end of the month following that in which the sales are made.

"The rule stated has been followed for many years in the collection of taxes of this character and the department feels that if it were to depart therefrom confusion and uncertainty would result which would interfere seriously with the collection of revenues. For these reasons the department is constrained to adhere to the rule mentioned and cannot make an exception thereto in favor of anyone."

"Reference is made to your letter of June 28, 1932, and to a conference on July 21, 1932, with a representative of your corporation, relative to filing a consolidated return with the collector of internal revenue at X city, of taxes due under Section 615 of the Revenue Act of 1932 for the various stores in Y city and other cities owned by your corporation and subsidiaries.

"Section 626 of the Revenue Act of 1932 provides that every person liable for any tax imposed under Title 4 of that act shall make monthly returns under oath and pay tax imposed under Title 4 to the collector for the district in which is located the principal place of business of the person making the return. There appears to be no authority under the law, or in the regulations made in pursuance of the law, whereby corporations which are affiliated may be permitted to make a joint return of excise taxes in any collection district other than the one in which the principal place of business of each corporation is located.

"It will, therefore, be necessary for each corporation affiliated with you to file a return and pay tax for its stores to the collector of internal revenue of the district in which the principal place of business of each such corporation is located. Such return, accompanied with the tax, must be filed with the collector on or before the last day of the month following that for which the return is made."

May Show Tax

"An item shown or billed to a customer as a Federal tax must in fact represent only an amount that has actually been paid to the Federal Government as a tax, and an oil company is privileged to post at retail stations the sign: 'Lubricating oil, per quart, 30 cents; plus Federal tax, 1 cent; total, 31 cents.'

"It makes no difference," Commissioner R. M. Estes said, "what manner the manufacturer bills to the distributor The manufacturer may bill the product at so much a gallon plus tax, or it may be sold at a definite price including the tax, or it may be sold at a flat price with no reference to the tax whatever. The important point is that where an item is shown or billed to a customer as a Federal tax, it must in fact represent only an amount that has actually been paid to the Federal Government as a tax."

American Petroleum Institute Weekly Refinery Statistics

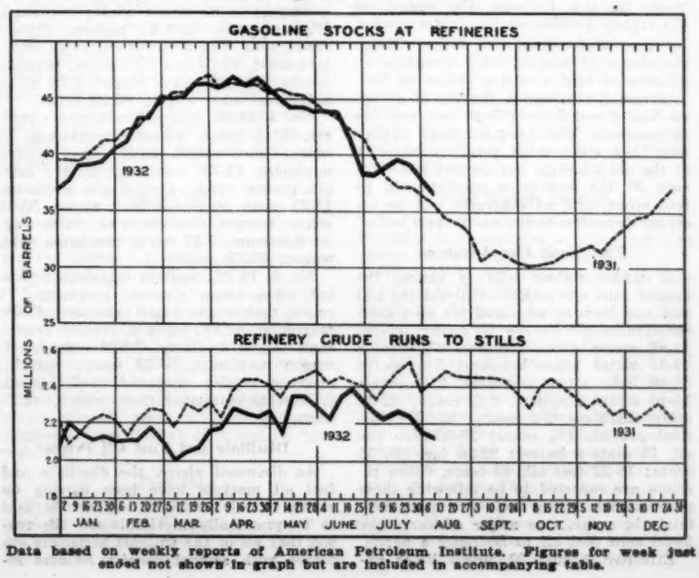
Figures below reported for week by American Petroleum Institute. (1) Per cent refinery capacity represented. (2) Daily average crude runs to stills. (3) Gasoline stocks. (4) Gas oil and fuel oil stocks All figures in 42-gallon barrels.

Week Ending August 13, 1932, Compared to Week Ago

	Week ending August 13				Week ending August 6			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
East Coast	100.0	431,300	6,191,000	8,517,000	100.0	462,900	5,740,000	8,164,000
Appalachian	91.8	85,200	1,393,000	1,058,000	91.8	82,100	1,457,000	1,114,000
Ind., Ill., Ky.	98.9	295,700	5,129,000	4,350,000	98.9	273,900	5,240,000	4,357,000
Okla., Kans., Mo.	89.6	282,700	3,225,000	3,334,000	89.6	268,600	3,043,000	3,166,000
Tex. Gulf	99.8	376,400	4,235,000	2,417,000	99.8	370,700	4,338,000	8,715,000
La. Gulf	100.0	101,900	1,400,000	9,042,000	100.0	102,900	1,529,000	4,530,000
Inland Texas	76.5	109,700	1,130,000	4,535,000	76.5	100,100	1,216,000	2,467,000
N. La. and Ark.	97.0	45,100	204,000	638,000	97.0	41,400	88,000	633,000
Rocky Mtn.	89.4	44,900	1,889,000	580,000	89.4	38,900	1,882,000	579,000
California	96.7	410,400	12,427,000	99,264,000	96.7	446,100	12,406,000	99,283,000
Total U. S.	95.1	2,163,300	37,273,000	133,735,000	95.1	2,127,600	36,939,000	133,008,000

Week Ending August 13, 1932, Compared to Year Ago

	Week ending August 13				Week ending August 8, 1931			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
East Coast	100.0	431,300	6,191,000	8,517,000	100.0	478,000	5,674,000	10,312,000
Appalachian	91.8	85,200	1,393,000	1,058,000	91.8	105,400	1,321,000	1,440,000
Ind., Ill., Ky.	98.9	295,700	5,129,000	4,350,000	98.9	341,700	5,420,000	4,144,000
Okla., Kans., Mo.	89.6	282,700	3,225,000	3,334,000	89.6	281,900	2,740,000	5,902,000
Tex. Gulf	99.8	376,400	4,235,000	2,417,000	99.6	415,100	5,512,000	7,387,000
La. Gulf	100.0	101,900	1,400,000	9,042,000	100.0	114,900	816,000	2,097,000
Inland Texas	76.5	109,700	1,130,000	4,535,000	....	120,200	1,154,000	3,291,000
La. and Ark.	97.0	45,100	204,000	638,000	....	59,800	120,000	1,047,000
Rocky Mtn.	89.4	44,900	1,889,000	580,000	89.3	42,600	1,478,000	761,000
California	96.7	410,400	12,427,000	99,264,000	96.5	479,000	11,646,000	97,495,000
Total U. S.	95.1	2,163,300	37,273,000	133,735,000	95.0	2,439,600	35,881,000	132,973,000



Data based on weekly reports of American Petroleum Institute. Figures for week just ended not shown in graph but are included in accompanying table.

Distillates and Fuel Oils Are Feature in Chicago; Sympathetic Strength Shown in Kerosene

By ROBERT C. CONINE
Chicago Bureau, The Oil and Gas Journal

CHICAGO, Aug. 15.—Distillates and fuel oils feature in the current Chicago district tank car and tank wagon markets, with sympathetic strength showing in the kerosene tank car markets. Advancing prices are expected through this week. Kerosene, which has been dormant for several weeks, is being ordered out in good quantity for blending due to extreme scarcity in the Nos. 1 and 2 heating oils.

Major refiners announce stiff advances in their distillate and fuel oil tank car markets, and are being followed generally. The larger distributors have announced advances in the tank wagon postings both in the open markets and on contract tops. Wholesale distributors say they have been moving kerosene with ease at 3 cents, Group 3, and they add that they would be glad to pay the top of last week's prices for the distillates and fuel oils. Observers in Chicago district oil trade circles say that the markets are not in the least threatened by the sharp price increases throughout the heating oil list. With the exception of a very limited number of transactions involving differential points, the entire structure is stronger than it has been in more than two years. Refiners offering high cold test low gravity materials have also advanced their quotations 5 to 10 cents a barrel.

Oil Heat Institute Announcement

Dissipating any doubts as to the actual betterment in the heating oil markets, the following announcement was forwarded to all members of the Chicago Burning Oil Heat Institute by J. M. Carson, general manager: "Reduced refinery runs of crude oil and extensive cracking for gasoline production has caused a shortage of better grades of furnace oil. The Oil and Gas Journal states the Standard Oil Co. of Indiana advanced the tank car price of its No. 1 furnace oil sharply 1 cent, f.o.b. Whiting last week. Sinclair Refining Co. moved up the Group 3 price on its lighter grades.

"Apex Motor Fuel Co., large Chicago distributor of burning oils, announces an advance of half a cent a gallon on Nos. 1, 2 and 3 oils, and a quarter of a cent on Nos. 4 and 5 fuels, both spot and top of contracts. The Apex company advises that they will accept pending contracts at the old schedule, but on and after August 20, the new price schedule will go into effect, and no contracts will be accepted thereafter except on the new basis."

Fuel Tank Car Advances

A major refiner who is among the largest tank car sellers of distillates and fuel oils Monday advanced his spot market quotations to the following levels: 41-43 water white kerosene, 3¼ cents; 42-44 water white kerosene, 3⅜ cents; 38-40 light straw distillate, 2⅛ cents; 38-40 straw distillate, 2¼ cents; 32-36 straw distillate, 2⅝ cents; 32-36 industrial gas oil, 1⅝ cents; 28-30 zero gas oil, 75 cents a barrel; 22-26 fuel oil, 55 cents; 18-22 fuel oil, 40 cents. Other refiners are reported to be following these prices or moving up their own quotations fairly in range. One major advanced the 28-30 zero fuel oil to 80 cents a barrel.

Effective August 20, prices listed under Chicago Oil Heat Institute will be advanced as follows: No. 1, from 6 and 7½-cent top, to 6½ and 8-cent top; No. 2, from 5½ and 7½-cent top, to 6 and 7½-cent top; No. 3, from 4¾ and 6¼-cent top, to 5¼ and 6¾-cent top; No. 4, from 4¼ and 5¼-cent top, to 4½ and 5½-cent top; No. 5, from 4 and 5-cent top, to 4¼ and 5¼-cent top. On deliveries of less than 350 gallons the spot price is one-half cent higher.

Tank Car Advance Justified

On the old tank wagon basis the tank car distillate and fuel oil markets had considerable room for improvement without paring down the distributors' profit to a losing margin. The following calculations are based on materials meeting the government specifications set out in Bulletin C812-29, and prices are gross after deduction of Group 3 freight. Taking the contract outlined in the distillate and fuel oil section of last week's Chicago market letter, we find that the distributors can expand or contract their margin of profit without reference to the refiner. In the following the oils Nos. 1 and 2 are given on a gallon basis, while oils Nos. 3, 4 and 5 are on barrel basis. Group 3 freight on the No. 1, is 2.442 cents a gallon, and on the No. 2, it is 2.22 cents a gallon. On the remaining products the Group 3 freight is 93.25 cents a barrel. The crude oil clause governing the refiner's contract gives a maximum increase of 0.28 cent a gallon, or 11.5 cents a barrel on the distillates and fuel oils.

No. 1, 36-40, contract maximum: present, 2.75 cents, absolute, 3.03 cents; tank wagon basis: minimum, 6 cents, maximum 7.5 cents; margin: present, 0.808 cent, maximum, 2.308 cents; margin with crude absolute maximum: minimum tank wagon, 0.525 cent, maximum tank wagon, 2.025 cents.

No. 2, 32-36, contract maximum: present, 2.5 cents, absolute, 2.78 cents; tank wagon basis: minimum, 5.5 cents, maximum, 7 cents; margin: present, 0.78 cent, maximum, 2.28 cents; margin with crude absolute maximum: minimum tank wagon, 0.5 cent, maximum tank wagon, 2 cents.

No. 3, 28-30, contract maximum: present, 92½ cents a barrel, absolute, $1.04 a barrel; tank wagon basis: minimum, $2, maximum, $2.625; margin, present crude, tank wagon minimum, 14.25 cents, maximum, 76.75 cents; margin, absolute crude: minimum tank wagon, 2.75 cents, maximum tank wagon, 65.25 cents.

No. 4, 24-26, contract maximum: present, 72½ cents, absolute maximum, 84 cents; tank wagon basis: tank wagon minimum, $1.79, maximum, $2.21; margin, present crude: tank wagon minimum, 13.25 cents, maximum tank wagon, 55.25 cents; margin, absolute crude, tank wagon minimum, 1.75 cents, maximum tank wagon, 43.75 cents.

No. 5, 18-22, contract maximum: present, 62½ cents, absolute maximum, 74 cents; tank wagon basis, minimum, $1.68, maximum, $2.10; margin, present crude: tank wagon minimum, 12.25 cents, tank wagon maximum, 54.25 cents; margin, absolute crude; minimum tank wagon, 0.75 cent, maximum tank wagon, 42.75 cents.

Distillate and Fuel Oil Prices

As discussed above, the distillate and fuel oil markets have been moving up strongly and continued support is said to be practically inevitable for the reason that all of the suitable materials are scarce with several district refiners reporting that they are far behind on shipments. Some refiners are holding up new contract business until they can gauge their gasoline requirements as current distillate and fuel oil storage is very low at their plants and they are not prepared to run crude oil to meet distillate and fuel oil requirements.

Monday's prices in the distillate and fuel oil tank car markets were as follows: 38-40 light straw distillate, 2¾ to 2⅞ cents, a sharp advance from 2⅜ to 2½ cents; 38-40 straw distillate, 2⅝ to 2¾ cents, an advance from 2¼ to 2⅜ cents; 32-36 straw distillate, 2½ to 2⅝ cents, an advance from 2⅛ to 2¼ cents. There seems to be considerable strength in the 32-36 industrial gas oil and most of the business is being offered at the top of today's range of 1⅝ to 1⅝ cents, an advance from last week's range of 1¼ to 1½ cents.

Major Advances Coke Prices

Empire Oil & Refining Co. is supplementing the strong upward movement in the distillates and fuel oils with the announcement Monday of an advance of 25 cents per ton in all grades of petroleum coke. The new prices on coke are as follows: Breeze, advanced from $3.75 to $4; pile run, advanced from $3.75 to $4; direct from still, advanced from $4.75 to $5; actual freight absorbed up to 80 cents. This company also advanced its egg coke from $6, f.o.b. refinery at East Chicago, to $6.25.

Kerosene Tank Car Markets

The kerosene tank car markets advanced in sympathy with the strong products with the 41-43 water white material being quoted Monday in a range of 3 to 3¼ cents, and the 42-44 water white kerosene, which is scarce, being priced at 3⅛ to 3⅜ cents. Prime white distillate was priced at a low of 2⅞ cents in scattered offerings, and little is said to be available. Saturday a distributor who has moved little kerosene for several weeks placed 16 cars at 3 cents.

Gasoline Tank Car Markets

The gasoline tank car markets continue unchanged from last week's postings, with the exception that some inquiries are being made on the high test materials and nominal figures have been adjusted an eighth of a cent. Major movements of gasoline have caused some of the smaller refiners and marketers to reconsider their recent tendency to sell under the ruling markets. The service station angle is somewhat better this week and it is known that at least one major company is seriously considering the advisability of making changes in the Q.D.A. similar to those announced by Standard of New Jersey. At Milwaukee the price of the third grade material was advanced by all service stations 1.7 cents. Standard Oil Co. of Indiana raised the third grade this amount and lowered the regular grade 1 cent, cutting down the 4.7-cent spread between the two grades to 2 cents. At St. Louis the third grade was advanced from 11.9 cents to 13.6 cents. It is indicated that the major companies consider the spread between the third and regular grades too great throughout the territory and it is expected that adjustments will be made wherever possible.

U. S. Motor, either 58-60° or 60-62° were still being sold to Chicago distributors at 4⅛ cents Group 3, and scouts of some of the larger refiners reported occasional 4-cent sales. These are not considered representative at this time, but those who are hoping, and acting accordingly, that the gasoline markets will not go on the skid, point out that while most large marketers will make every effort to keep the spot markets up by holding their own prices up, these marketers will have less incentive to do so as demand tapers and there is less to lose in contract business. For this reason every legitimate means is urged to halt the growing low price offerings.

Prices to blenders of ordinary and high antiknock motor fuels are fast approaching the regular gasoline markets. The high octane gasolines are still in fair shape price wise although the margin between the three octane brackets has widened considerably. Natural gasoline prices to the trade Monday were higher as follows: 15-pound, 3⅜ to 3½ cents; 18-pound, 3⅛ to 3¼ cents; 20-pound, 2⅞ cents; 22-pound, 2⅝ cents; 26-70, 2⅜ to 2½ cents. Blending naphthas are reported exceedingly scarce, and the only 4⅜-cent material found was a 48-50 naphtha of 450 endpoint without octane specification. The 50-52, 450 endpoint blending naphtha moved up to a range of 4⅝ to 5⅞ cents, an advance of a quarter of a cent. The 50-52, 415 endpoint, 60-62 octane number blending naphtha advanced to 4¾ cents, and a 50-52, 425 endpoint naphtha of 75 octane number was offered in small quantities at 5⅝ cents.

Monday's gasoline tank car prices were as follows: U. S. Motor, 4⅜ to 4⅝ cents; 60-62, 400 endpoint, 4½ to 4⅝ cents; 64 66, 375 endpoint, 4¾ to 5 cents; 68-70, 360, 5 to 5⅛ cents.

Recent Mexican Decisions Alarm Petroleum Circles

Four recent decisions by the supreme court of Mexico adverse to American investments have disturbed petroleum circles in that country, according to a copyrighted dispatch from Mexico City to the New York Herald-Tribune. The supreme court's new decisions, it is stated, tend to produce insecurity for the future, as they uphold the executive's right to annul a presidential order or concession issued by a previous executive. The decisions, it is added, are far-reaching, although in the present instance they affect only oil interests.

In brief, the four decisions uphold the action of President Rubio in nullifying a presidential decree issued by Emilio Portes Gil, his predecessor, thereby canceling a concession based upon that order. By the decisions, the supreme court denied the petitions for an injunction asked by representatives of the Standard Oil Co. of California. The acreage in question is known as the Lilliendahl group, after F. A. Lilliendahl of Los Angeles, whose Mexican holdings are controlled by Standard of California. Mr. Lilliendahl leased large tracts in Mexico years ago and subsequently subleased them to the Calmex Petroleum Co. of Los Angeles, a subsidiary of Standard of California.

If a like decision should be handed down in the case of similar nature which will be adjudicated by the Mexican supreme court shortly, the dispatch adds, the five decisions would establish a precedent by which Mexican courts would be guided.

GRISELL ELECTED SECRETARY

T. O. Grisell, of New York City, has been elected secretary of the Pennsylvania Grade Crude Oil Association, succeeding Rodney J. Alexander, resigned.

East Coast Refinery Gasoline Market Steadier; Gulf Shipments to Northwest Reported

By A. E. MOCKLER
New York Bureau, The Oil and Gas Journal

NEW YORK, Aug. 15.—Refinery gasoline markets in the East Coast area developed a somewhat steadier undertone during the past week, following the easier tendency of the previous week, on reports that one or more cargoes had been sold for prompt shipment out of the Gulf to the Pacific Northwest. It has been known for the past few weeks that three or four cargoes were accumulating in the hands of independent refiners marketing out of the Gulf, and it had been feared that these cargoes would find their way to the Atlantic Seaboard. Movement of this surplus motor fuel to the Pacific Northwest, while extremely disconcerting to California refiners, who have frequently in past years dumped excess gasoline in East Coast areas, but have never been called upon to face this type of competition themselves, nevertheless tends to lift pressure off the eastern seaboard market and imparts strength to the market position at a time when it is badly needed.

There were no developments of outstanding importance in other divisions of the refined products market, with prices generally displaying a fairly steady undertone in tank car sales.

With Stanlard Oil Co. of New Jersey placing a new line of hydrogenated motor oils on sale late this week, and the disclosure that that company's hydrogenation plants at Bayway and Baton Rouge are now going into large-scale operation, following two years of experimental work on a commercial scale, the trade in the East is awaiting with interest the market effects of this development.

With continued stagnation in the export market, considerable interest was shown in the news from abroad indicating further infiltration on the part of the Soviet in markets where American interests are heavy sellers. A syndicate composed of 11 independent French companies, of whom several have been regular buyers in the U. S. Gulf market, have closed a five-year contract with the Soviet for their total requirements of crude and products, and a Canadian independent marketer, now completing a new refinery at Montreal, has bought approximately 400,000 bbls. of Russian crude which will be delivered during the next three months. The New Zealand market, hitherto almost exclusively controlled by American sellers and the Royal Dutch-Shell, is being invaded by the Soviet naphtha syndicate which will start distribution in about three months, inaugurating its operations with a price cut of 3 pence per gallon under existing posted gasoline prices in that country. Although European oil leaders continue to insist that the importance of Russia's competition in world markets has been greatly overstated by the Soviet, recent day-to-day developments with respect to Soviet competition in world markets make it increasingly evident that the world oil companies are confronted with the alternative of bringing Russia into an international accord, or facing a renewal of the drastic price wars which have proved so destructive in export markets in recent years.

Refinery Gasoline

While shading of posted prices continues in tank car markets on the Atlantic Seaboard, particularly on gasoline under 60 octane number, the trade was cheered this week by the report that an independent seller at the Gulf had sold a cargo of 50,000 bbls. of high octane motor fuel for shipment to Portland, Ore., with the shipment scheduled for August 18 out of the Gulf. Inquiries in the tanker market for boats for movement of clean oil from the Gulf to the Pacific Northwest indicated that one or more additional cargoes might move westward.

Although major East Coast companies do not like to see the stability of the Pacific Coast market threatened, they are naturally more interested in conditions in their own home territory, and it is generally felt that movement of surplus gasoline out of the Gulf to the Pacific Northwest has improved the statistical position of East Coast markets by removing the pressure exerted by the presence of three or four cargoes of accumulated gasoline which have been reported at the Gulf in recent weeks. Up to a few years ago it was common practice for California refiners to dump surplus gasoline in eastern cargoes, much to the disadvantage of East Coast refiners, and during the past year similar "dumping" of gasoline out of East Texas has reacted against refiners here.

There was a continued good movement in tank car markets throughout the week, although distributors were still showing a tendency to limit purchases to actual requirements, in view of the unsettled market undertone. Refiners were posting low octane gasoline at 8 to 8¼ cents in tank car lots here, but this price was being freely shaded in some quarters. On motor fuel of 65 octane number and above, the posted price continued at 8¼ to 8¾ cents, and this grade likewise was coming in for cutting in price in some instances. Major companies, however, were holding to posted prices in most cases, and it was indicated that if price shading on the part of smaller sellers continued, the major companies would "break" the posted market to bring posted prices in line with actual going figures. The statistical position of the market showed improvement during the past week, with a further reduction in gross gasoline stocks in this area.

In the Boston market, one seller was quoting his featured brand of high octane gasoline at 9 cents, although the average going price of other sellers was 8¾ cents. At Baltimore, where a flat price of 8¾ cents for high octane gasoline had previously been posted in the tank car market, one seller was quoting 8½ cents. The market at other points in the East was unchanged, so far as "official" posted prices were concerned, although sellers were shading to meet competition where necessary.

Tank Wagon Gasoline

Volume in tank wagon markets continued fairly heavy, but reports of declining aggregate gallonage in some sections continue. Considerable uncertainty exists in marketing circles as to probable demand during the closing quarter of the year.

In connection with the drop in consumption in Greater New York it is reported that more than 10,000 taxicabs are now laid up out of service, which alone would account for a considerable reduction in gallonage. Allowing for consumption of but 10 gallons per cab daily, these cabs, if still in operation, would account for some 3,000,000 gallons of gasoline per month additional in New York City alone. Such an added volume, conceivably, would make considerable difference in the competitive position here.

New York City gasoline prices continue 3 to 4 cents under those existing in the remainder of the territory, and despite this wide differential even current low prices are being shaded in some sections. Leading brands of gasoline can be had at retail in a few sections of the city at 7 gallons for $1, including all taxes, which makes but a net return of some 10 2/7 cents at the station, out of which the station operator's profit must come. The net back to refiners on retail sales in Greater New York, therefore, is considerably under that on tank car sales, a most unusual condition.

There were no general revisions in tank wagon and service station prices in the territory, but price shading was still general in some sections, and leading companies were combating this with their third grades. It is evident that tank wagon gasoline markets at present constitute the weakest part of the refined products price structure, and it is generally felt in marketing circles that further sharp drops in refinery holdings are needed to insure a reasonable degree of stability in the retail field.

Kerosene

A more spirited demand for kerosene was reported at refineries, and the market was slightly firmer, with the posted price range still 5½ to 6 cents, although the market was still being shaded slightly in some quarters. Refiners report that the use of kerosene burners in cooking ranges is expanding rapidly, creating an important new market for this grade of burning oil.

Tank wagon kerosene prices were again without change, with marketers reporting some increase in gallonage, and looking for a spirited upturn in consumption with the advent of cooler weather.

Furnace Oil

Considerable activity in contract business in furnace oils was again reported, and the refinery market held steady on both the light and heavy grades.

As of June 30, domestic oil burner manufacturers, according to the Bureau of the Census, held new orders for 4,371 burners, with unfilled orders on hand for 473, compared with new orders for 6,046 units, and unfilled orders for 971, on the same date last year, and new orders for 7,927 burners and unfilled orders for 2,961 units on June 30, 1930. At the close of June this year manufacturers' total stocks were 10,137 units, against 9,193 on the same date in 1931 and 12,161 in 1930.

Diesel Oil

Tank car movement of Diesel oil was a little more active, and refiners were holding the market unchanged at 4 cents per gallon, f.o.b. or terminals.

Volume of sales in the marine division of the market continued along routine lines, with the posted price unchanged at $1.65 per barrel, bulk, f.o.b. refinery terminals, and $1.71½ per barrel f.a.s. New York harbor.

The final tax ruling on Diesel oil exempts this oil, when sold for bunkering purposes, from the tax of 1 cent on "motor fuels."

Fuel Oil

Bunker "C" continued to meet with a good movement at 85 cents per barrel in bulk at terminals, and 90 cents per barrel f.a.s. in the harbor limits.

While sellers both at the Gulf and in California continue to offer bunker oil at attractive differentials under the East Coast price, no activity in the cargo market has been reported .

Considerable quantities of South American fuel oil continue to arrive at East Coast ports, nothwithstanding the import tariff.

Gas Oil

Gas manufacturing companies are drawing stocks in slightly better volume, but no real increase in activity in this division is looked for until daylight saving ends, at which time consumption normally shows a considerable spurt.

A cargo of 80,000 bbls. of California gas oil was received here a short time ago, but has moved into consuming channels without disrupting the spot market, which is quoted at 4 cents for 28 gravity plus recycled oil in tank car lots.

California gas oil is expected to move here in larger volume during the closing quarter, considerable having been bought in the East for distribution as domestic heating oil.

Lubs

Spot business was again along rather curtailed lines, with the market unchanged. On bright stocks and cylinder oils, in barrels, f.a.s. New York, the market was held as follows: 600 filtered, 20½ to 21 cents per gallon; 600 Warren E, 23 to 23½ cents; 600 s.r. unfiltered, 20 to 21 cents; 650 s.r. unfiltered, 23 to 24 cents; 600 flash s.r. 24 to 25 cents; 530 flash s.r. 29 to 30 cents; bright stock, No. 8 color, 31 to 33 cents; and bright stock, No. 6½ color, dil., 29 to 31 cents.

Tank car movement of red and pale oils remained light. Pale engine oil, in bulk, was held as follows: 230 No. 3¾ color, 10 to 10½ cents; 180 No. 3¼ color, 9½ to 9¾ cents; 100 No. 2¼ color, 5½ to 6 cents. On red engine oil, sellers were quoting 300 No. 6½ color at 9½ to 9¾ cents per gallon, 250 No. 6 color at 9 to 9¼ cents, and 200 No. 6 color at 8¼ to 8½ cents.

Wax and Petrolatum

Domestic demand for the white grades of petrolatum has picked up somewhat, but volume has not attained sufficient importance to make for a higher market, and prices were unchanged on all grades.

Sales of refined paraffin wax were along routine lines, although a move active inquiry for both the high and low melting points was reported in some divisions, and sellers were looking for more activity during the closing quarter, domestic consuming manufacturers apparently being rather short on stocks. Prices were unchanged.

Gulf Export Market

No cargo sales of either gasoline or kerosene were reported at the Gulf, and prices were nominally unchanged.

Germany buyers were reported to have contracted for 50,000 tons of Panuco crude, for shipment during the remainder of the year and during 1933, at 45 cents per barrel, plus taxes, for the remainder of 1932 and 46 cents per barrel, same basis, for 1933 deliveries.

Interest was shown in marketing circles here over rumors from abroad that the international oil conference would reassemble here next month with the likelihood that an accord would be reached with the Soviet. Thus far, however, there has been nothing official to indicate that any further conference with officials of the Soviet naphtha syndicate is in sight.

(Continued on Page 44)

REFINERY AND CRUDE PRICES

Quotations on refined products are for interstate or export movement except as otherwise noted

EXCLUSIVE OF TAXES

The following quotations are exclusive of the Federal excise taxes of 1 cent a gallon on gasoline and 4 cents on lubricating oils, which became effective June 21.

Gasolines

	Aug. 16		Aug. 9	
OKLAHOMA (Group 3)—				
*U. S. Motor	.04⅜	.04¾	.04½	.04¾
60-62 400	.04½	.05	.04⅝	.05
64-66 390	.04⅝	.05⅛	.04¾	.05⅛
64-66 375	.04¾	.05⅛	.04¾	.05⅛
68-70 350	.04⅞	.05¼	.04⅞	.05¼
NORTH TEXAS—				
*U. S. Motor	.04⅜	.04½	.04⅜	.04½
60-62 400	.04½	.04⅝	.04½	.04⅝
64-66 390	.04⅝	.04¾	.04⅝	.04¾
64-66 375	.04¾	.05	.04¾	.05
64-66 360	.04⅞	.05⅛	.04⅞	.05⅛
†NORTH LOUISIANA—				
*U. S. Motor	.05		.05	
60-62 400	.05¼		.05¼	
†ARKANSAS—				
*U. S. Motor	.05		.05	
CHICAGO Based on Okla. (Group 3)—				
*U. S. Motor	.04⅜	.04⅝	.04⅜	.04⅝
60-62 400	.04½	.04⅝	.04½	.04⅝
64-66 375	.04¾	.05	.04⅞	.04⅞
Aviation fighting grade	.05	.05¼	.05	.05¼
68-70 360	.05	.05⅛	.04⅞	.05

Octane Ratings—Above quotations cover price ranges on gasoline in which no octane rating is given. On August 16, in the case of the U. S. Motor and 60-62 400 endpoint grades, where an octane rating of 57-65, inclusive, is guaranteed, prices are three-eighths cent per gallon higher than quotations shown in above tables; where an octane rating of better than 65 is guaranteed, the prices are five-eighths cent higher. In the case of the remaining grades, gasolines of 65 octane rating or higher are quoted one-half cent higher than the quotations shown in above tables.

Unless otherwise provided by agreement of buyers and sellers, the Series 30 testing equipment of the Ethyl Gasoline Corp. is recognized as standard in determining octane ratings.

*Present distillation specifications on U. S. Motor gasoline are: 10 per cent evaporated, 167° F. maximum; 50 per cent, 284° F. maximum; 90 per cent, 392° F. maximum; residue not exceeding 2 per cent; maximum vapor pressure, 12 pounds. Additional specification on U. S. Motor gasoline available from bulletins of Bureau of Mines, Washington, D. C.

†For Arkansas, Louisiana and Mississippi delivery.

PENNSYLVANIA (inland refineries)—				
U. S. Motor	.06⅞	.07	.06⅞	.07
60-62 400	.07	.07⅛	.07	.07⅛
64-66 375	.07⅛		.07⅛	
68-70 350	.07¼	.07⅜	.07¼	.07⅜

Octane Ratings—In the case of U. S. Motor and 60-62 400 endpoint grades, same price differentials based on octane ratings as shown in above tables for Oklahoma and other Mid-Continent areas:

CALIFORNIA (domestic movement only)—				
54-58 U. S. Motor	.06¼	.06⅜	.06¼	.07
58-60 400	.06½	.07¼	.06¾	.07¾
EAST COAST—				
U. S. Motor, below 65 octane:				
New York (Bayonne)	.08	.08¼	.08	.08¼
Boston	.08¼		.08¼	
Baltimore, Md.	.08¼		.08¼	
Charleston, S. C.	.07¾	.08¼	.07¾	.08¼
U. S. Motor, 65 octane and above:				
New York (Bayonne)	.08½	.08¾	.08½	.08¾
Boston	.08¾	.09	.08¾	
Baltimore, Md.	.08½	.08¾	.08¾	
Charleston, S. C.	.08½	.08¾	.08½	.08¾
GULF COAST (domestic)—				
U. S. Motor, 65 octane and above	.05½	.05¾	.05½	.05¾
U. S. Motor, below 65 octane number	.05¼	.05½	.05¼	.05½

Naphthas

	Aug. 16		Aug. 9	
OKLAHOMA (Group 3)—				
50-52 450 (blending)	.04½	.04⅝	.04½	.05⅝
PENNSYLVANIA (inland refineries)—				
50-54 430-450 (blending)	.06½	.06¾	.06½	.06¾
ARKANSAS—				
48-50 450 (blending)	.05	.05⅛	.05	.05⅛
CHICAGO Based on Okla. (Group 3)—				
50-52 450 (blending)	.04⅝	.04⅞	.04⅝	.04⅝
Cleaners' naphtha, 56-58 gr., 200 i.b.p.-320 e.p.	.06¼	.06½	.06⅜	.06½
Lacquer diluent, 180 i.b.p.-250 e.p.	.08⅜	.08⅝	.08⅜	.08⅝
Lacquer diluent, 140 i.b.p.-200 e.p.	.08¾	.09	.09	
Rubber solvent, 68-70 gr., 100 i.b.p.-300 e.p.	.06¼	.06½	.06¼	.06½
Stoddard solvent, 300 i.b.p.-410 e.p. over 100° flash	.05½	.05¾	.05⅝	.05¾
Pet. thinner, 290, 300 i.b.p., 415 e.p., over 83° flash	.05¼	.05½	.05	.05¼
V.M.&P. naphtha, 56-58 gr., 190-200 i.b.p.-330 e.p.	.06	.06¼	.06	.06¼
Petroleum spirits	.04⅛	.05¼	.04⅛	.05¼

Natural Gasolines

	Aug. 16		Aug. 9	
OKLAHOMA (Group 3)—				
Grade 18-55	.02¾	.02⅞	.02⅞	
Grade 26-70	.02¼		.02⅝	
Grade 30-70	.02⅛		.02¼	
*Low vapor pressure grades:				
15 lb. v.p. (max.)	.03	.03⅛	.03⅛	
11 lb. v.p. (max.)	.03⅝	.03⅞	.03⅞	.04
NORTH TEXAS—				
Grade 18-55	.02⅜		.02¾	.02⅞
Grade 26-70	.02¼		.02¼	.02⅝
Grade 30-70	.02⅛		.02¼	
*Low vapor pressure grades:				
15 lb. v.p. (max.)	.03		.03⅛	
11 lb. v.p. (max.)	.03¾		.03⅞	
NORTH LOUISIANA—				
Grade 26-70	.02½		.02⅝	
CALIFORNIA—				
75-78 375	.04½	.05½	.04½	.05½

Note—Grades 18-55, 26-70 and 30-70 are three of 24 grades adopted by the Natural Gasoline Association of America effective January 1. The grades are based on pounds vapor pressure and amount evaporated at 140° F. While not exactly the same specifications apply, Grade 18-55 corresponds to the former Grade A, Grade 26-70 to former Grade AA and Grade 30-70 to former Grade BB.

*All grades have minimum recovery of 96 (natural gasoline method).

Kerosenes

(All kerosenes water white)

	Aug. 16		Aug. 9	
OKLAHOMA (Group 3)—				
41-43	.02⅞	.03	.02¾	.03
42-44	.03⅛	.03¼	.03	.03⅛
NORTH TEXAS—				
40-41	.02⅝		.02½	
41-43	.02¾	.02⅞	.02⅝	.02¾
†NORTH LOUISIANA—				
41-43	.03½		.03½	
42-44	.03¾		.03¾	
†ARKANSAS—				
41-43	.03½		.03½	
PENNSYLVANIA (inland refineries)—				
45	.04½	.04¾	.04½	.04¾
46	.04⅝	.04⅞	.04⅝	.04¾
47	.05	.05⅛	.04¾	.05
CHICAGO (Based on Group 3)—				
41-43	.03	.03¼	.02⅞	.03
42-44	.03⅛	.03⅜	.03	.03⅛
*CALIFORNIA—				
38-40 high burning test	.04	.05	.04	.05
NEW YORK (Bayonne, N. J.)—				
41-43	.05½	.06	.05½	.06
GULF COAST (domestic)—				
41-43 water white	.04¼	.04½	.04¼	.04½

*For Pacific Coast consumption.
†For Arkansas, Louisiana and Mississippi delivery.

Tractor Fuels*

	Aug. 16		Aug. 9	
OKLAHOMA (Group 3)—				
39-40 prime white	.02¾		.02⅝	
38-40 light straw	.02⅝		.02½	
NORTH TEXAS—				
38-40 light straw	.02½		.02⅜	
CHICAGO (Based on Group 3)—				
38-40 light straw	.02¾	.02⅞	.02⅜	.02½
PENNSYLVANIA (inland refineries)—				
41-43 prime white	.04		.04	

*There are no standard specifications for tractor fuels. Grades commonly sold have flash under 175° F. (open cup) and under 575° F. endpoint and less than .2 per cent sulphur. Tractor fuels are available from all Mid-Continent refining groups at prices in line with the Oklahoma market taking into consideration differentials in freight rates.

Furnace Oils*

	Aug. 16		Aug. 9	
OKLAHOMA (Group 3)—				
32-36 straw	.02¼		.02⅛	
36-38 straw	.02½		.02⅜	
38-40 straw	.02⅝		.02½	
39-41 prime	.02¾		.02⅝	
NORTH TEXAS—				
38-40 straw	.02½		.02⅜	.02½
†NORTH LOUISIANA—				
36-40	.02⅜		.02¾	
†ARKANSAS—				
32-36	.02⅝		.02½	
CHICAGO (Based on Group 3)—				
32-36 straw	.02½	.02⅝	.02⅛	.02¼
38-40 straw	.02⅝	.02¾	.02¼	.02⅜
PENNSYLVANIA (inland refineries)—				
40-41 prime white	.03½		.03¼	.03½
NEW YORK (Bayonne, N. J.)—				
32-36	.04½		.04½	
36-40	.04½		.05½	
21 (industrial)	.04		.04	

*Above prices are for furnace oils of zero cold test under 190° F. flash and good odor.
†For Arkansas, Louisiana and Mississippi delivery.

Gas Oil, Diesel Oil and Fuel Oil

Gas oil (G.O.) quoted per gallon basis; Diesel oil and fuel oil per barrel.

	Aug. 16		Aug. 9	
OKLAHOMA (Group 3)—				
32-36 (G.O.) cracking stock	.01½	.01⅝	.01½	
U.G.I. (G.O.)	.01⅝		.01⅝	
32-36, zero to 15 (G.O.) high flash	.01⅝	.01⅞	.01⅝	.01⅞
28-30, zero to 10	.65		.55	
26-30, zero to 10	.60	.65	.50	.52½
24-26	.45	.50	.42½	.45
20-22	.40	.45	.40	.45
16-20	.37½	.40	.37½	.40
Below 16	.35	.37½	.35	.37½
NORTH TEXAS—				
32-36 (G.O.) industrial	.01⅜		.01⅜	
22-26	.45	.50	.45	.50
Below 20	.35	.40	.32½	.37½
NORTH LOUISIANA—				
32-36 (G.O.) zero	.02	.02⅛	.02	.02⅛
14-16	.35	.40	.35	.40
†ARKANSAS—				
32-36 (G.O.) zero	.02		.02	
14-16	.35	.40	.35	.40
CHICAGO (Based on Group 3)—				
32-36 (G.O.) industrial	.01⅜	.01⅝	.01¼	.01½
28-30 (zero)	.70	.75	.60	.65
22-26	.50	.55	.42½	.47½
18-22	.35	.45	.30	.35
Below 18	.30	.35	.27½	.32½
PENNSYLVANIA (inland refineries)—				
36-40	.03	.03¼	.03	.03¼

Note—Fuel oils of more than 40 cold test generally 5 to 10 cents per barrel less in all areas than shown in above tables.

†For Arkansas, Louisiana and Mississippi delivery.

CALIFORNIA—				
30-34 (G.O.) per bbl.	.70	.85	.70	.85
27 plus Diesel	.70	.85	.70	.85
15-19 bunker (at tidewater)	.55	.65	.55	.75
15-19 (cargo lots)	.50	.60	.50	.65
15-19 (tank car)	.40	.60	.45	.65
GULF COAST—				
28-30 (G.O.)	.03	.03⅛	.03	.03⅛
28-30 Diesel	1.50		1.50	
Bunker C (bulk cargoes)	.55	.60	.55	.60
Bunker C (bunkers)	.70		.70	
NEW YORK (Bayonne, N. J.)—				
28 plus (G.O.)	.04		.04	
*28-30 Diesel	1.65		1.65	
26-32 Diesel (tank cars)	.04		.04	
†Bunker C	.85		.85	

*Lighterage 6½ cents per barrel.
†Lighterage 5 cents per barrel.

Petroleum Coke*

Prices per ton f.o.b. refineries in Chicago area.

Breeze (screenings)	3.75	4.00	3.50	3.75
Still runs	4.00	4.25	3.75	4.00
Lump and egg	5.50	6.25	5.00	5.50

*Refineries will absorb freight to 80 cents a ton.

Neutral Oils

(Viscosity at 100° F. and color)

	Aug. 16		Aug. 9	
OKLAHOMA (Group 3)—				
Zero to 10 Cold Test:				
150-3	.06¼	.06½	.06¼	.06½
180-3	.07½	.07¾	.07½	.07¾
180-4	.07	.07¼	.07	.07¼
200-3	.08¼	.08½	.08¼	.08½
200-4	.08	.08¼	.08	.08¼
240-3	.09¾	.10	.09¾	.10
240-4	.09¼	.09½	.09¼	.09½
280-3	.11¼	.11½	.11¼	.11½
280-4	.10¼	.10½	.10¼	.10½
300-3.5	.11¾	.12	.11¾	.12
350-3.5	.12¼	.12½	.12¼	.12½
400-4	.12¾	.13	.12¾	.13
500-4.5	.13¼	.13½	.13¼	.13½
100-2 paraffin oil	.04¼	.04½	.04¼	.04½
15-30 Cold Test:				
200-3	.07¾	.08	.07¾	.08

200-4	.07½	.07¾	.07½	.07¾
240-3	.09¼	.09½	.09¼	.09½
240-4	.08¾	.09	.08¾	.09
280-3	.10¾	.11	.10¾	.11
280-4	.09¾	.10	.09¾	.10
PENNSYLVANIA—				
150 vis., No. 3, 400-405:				
Zero pour test	.15	.16	.15	.16
10 pour test	.14	.15	.14	.15
15 pour test	.13½	.14½	.13½	.14½
25 pour test	.12¾	.13¼	.12¾	.13¼
30 pour test	.12¾	.13	.12¾	.13
180 vis., No. 3, 25 pour test	.15½	.16	.15½	.16
200 vis., No. 3:				
Zero pour test	.22	.23	.22	.23
10 pour test	.21	.22	.21	.22
15 pour test	.19½	.20	.19½	.20
25 pour test	.17	.17¼	.17	.17¼
30 pour test	.17		.17	
GULF COAST—				
Pale Oils:				
100-2-2½	.05		.05	
200-3	.06½		.06½	
300-3	.07		.07	
500-3½	.08	.08½	.08	.08½
750-3½	.09	.09½	.09	.09½
1,200-3½	.10½	.11	.10½	.11
2,000-4	.12	.12½	.12	.12½
Red Oils:				
200-5-6	.05	.05½	.05	.05½
300-5-6	.05½	.06	.05½	.06
500-5-6	.06¾	.07	.06¾	.07
1,200-5-6	.09½	.10	.09½	.10
2,000-6 plus	.11	.11½	.11	.11½
CALIFORNIA—				
Pale Oils:				
100-2½-3	.07¾	.08	.07¾	.08
200-2½-3	.07¾	.08	.07¾	.08
300-3-3½	.08¼	.08½	.08¼	.08½
350-3-4	.08¾	.09	.08¾	.09
400-3-4	.09¼	.09¾	.09¼	.09¾
450-3-4	.09¾	.10	.09¾	.10
550-3-4	.10¼	.11	.10¼	.11
Red Oils:				
200-4½-5	.07	.07¼	.07	.07¼
300-5-6	.07½	.07¾	.07½	.07¾
350-5-6	.07¾	.08	.07¾	.08
400-5-6	.08	.08¼	.08	.08¼
450-5-6	.08¼	.08½	.08¼	.08½
500-5-6	.08½	.08¾	.08½	.08¾
600-5-6½	.08¾	.09	.08¾	.09
700-6½ plus	.09	.09¼	.09	.09¼
750-6½ plus	.09	.09½	.09	.09¼
900-6½ plus	.12	.13½	.12	.13½

Bright and Steam Refined Stocks

OKLAHOMA (Group 3)—	Aug. 16		Aug. 9	
630 light green	.07¾	.08	.07¾	.08
600 light green S.R.	.05	.06	.05	.06
600 dark green S.R.	.04	.04½	.04	0.4½
Bright Stock:				
190-200 D	.23		.23	
150-160 D, 0-10	.22		.22	
150-160 D, 10-25	.21½		.21½	
150-160 D, 25-40	.21		.21	
150-160 E	.21		.21	
PENNSYLVANIA—				
600 S.R.	.14	.15	.14	.15
650 S.R.	.17	.17½	.17	.17½
600 Pennsylvania flash	.18	.18½	.18	.18½
600 D filtered	.22½	.23	.22½	.23
600 E filtered	.16¾	.17	.16¾	.17
Pennsylvania Grade bright stock:				
Bright Stock, No. 8 color, 145-50 vis.				
210-540-550 flash:				
10 pour test	.28	.30	.28	.30
15 pour test	.27	.27½	.27	.27½
25 pour test	.26	.26½	.26	.26½
35 pour test	.26		.26	

Wax and Petrolatum

(Prices per pound)

OKLAHOMA (Group 3)—	Aug. 16		Aug. 9	
124-126 white crude scale	.01⅝	.01¾	.01⅝	.01¾
PENNSYLVANIA—				
122-124	.01⅞		.01⅞	
124-126	.02		.02	
NEW YORK (Bayonne, N. J.)—				
Refined Wax:				
120-122	.02⅝		.02⅝	
125-127	.02⅞		.02⅞	
130-132	.03¼		.03¼	
133-135	.04		.04	
135-137	.04⅛		.04⅛	
Petrolatum in barrels in carload lots:				
Dark green	.01¾		.01¾	
Amber	.02⅛		.02⅛	
Extra amber	.02½		.02½	
Cream	.04⅝		.04⅝	
Lily white	.05½		.05½	
Snow white	.06½		.06½	

Export Prices

GASOLINE				
GULF COAST—	Aug. 16		Aug. 9	
U. S. Motor	.04½		.04½	
60-62 400	.04⅝		.04⅝	
61-63 390	.04¾		.04¾	
64-66 375	.05		.05	
LOS ANGELES, CALIF.—				
U. S. Motor, 53-55, 437 e.p.	.03¾	.04¼	.03¾	.04¼
U. S. Motor, 65 octane num.	.05		.05	
U. S. Motor, 67 octane num.	.05¼		.05¼	
U. S. Motor, 69 octane num.	.05½		.05½	
58-60 400 endpoint gasoline	.04¼	.05	.04¼	.05
KEROSENE				
GULF COAST—				
41-43 prime white	.04⅜		.04⅜	
41 water white	.04½		.04½	
LOS ANGELES, CALIF.—				
41-43 water white	.04	.05	.04	.05
LUBRICANTS				
NEW YORK (Bayonne, N. J.)—				
600, steam refined cylinder stocks, in bbls.	.21	.22	.21	.22
650, steam refined	.24	.25	.24	.25
600, Pennsylvania flash	.24½	.25	.24½	.25
630, Pennsylvania flash	.29	.30	.29	.30
600, Warren E	.23½	.24	.23½	.24
600, Oil City E	.22½	.23	.22½	.23
Light 140-150 bright stocks	.32	.33	.32	.33
Dark 140-150 bright stocks	.30	.31	.30	.31
NEW YORK (f.a.s.) (in bbls.)—				
600 filtered	.20½	.21		
600 Warren E	.23	.23½		
600 S.R. unfiltered	.20	.21		
650 S.R. unfiltered	.23	.24		
600 flash S.R.	.24	.25		
630 flash S.R.	.29	.30		
Bright stock, No. 8 color	.31	.33		
Bright stock, No. 6½ color, dil.	.29	.31		
NEUTRAL OILS				
NEW YORK—				
Pale Engine Oil, Bulk (vis. at 100):				
230-33¾	.10	.10½		
180-31¼	.09½	.09¾		
100-21¼	.05½	.06		
Red Engine Oil, Bulk (vis. at 100):				
300-6½	.09½	.09¾		
250-6	.09	.09¼		
200-6	.08¼	.08½		

Crude Oil Prices

Oklahoma, Kansas, North and East Central Texas

East Texas (Apr. 1, 1932)† ..... $ .98
East Texas (April 11, 1932)‡ ..... .98
Corsicana heavy* ..... .64
Other fields ..... See gravity table

†Posted by Magnolia Petroleum Co., Sinclair Refining Co., Panola Pipe Line Co., Tidal Refining Co. and The Texas Company. ‡Gulf Pipe Line Co. and Atlas Pipe Line Co. *Magnolia Petroleum Co.

Eastern States

JOSEPH SEEP PURCHASING AGENCY
(Effective April 25, 1932)

Pennsylvania Grade Oil in National Transit Lines (Bradford Field) (Mar. 14, 1932) $2.03
Pennsylvania Grade Oil in Southwest Pennsylvania Lines (Aug. 11, 1932) .. 1.72
Peana Grade Oil in Eureka Pipe Line Lines (Aug. 11, 1932) 1.67
Peana Grade Oil in Buckeye Pipe Line Lines (Aug. 11, 1932) 1.52
Corning Grade Oil in Buckeye Pipe Line Co.'s line (Apr. 26, 1932) 1.05
Ragland Grade Oil in Cumberland Pipe Lines (Kentucky) (Jan. 10, 1931) ... .60

PENNZOIL CO.
(Effective April 25, 1932)

Pennsylvania Grade Oil in National Transit Lines:
Group A $1.97
Includes Cochran, Franklin, Hamilton and Doolittle districts.
Group B 1.94
Includes Titusville district.
Group C 1.95
Includes Turkey and Tidiout districts.
Group D 1.94
Includes Bear Creek and Porkey districts.
Group E 1.92
Includes Eidenau, Bull Creek, Rough Run, Carbon, Dipner, Bredin, McJunkin, Jameson, Kennerdell, Emlenton, Tiona, Lacy and Kinzua districts.
Price depends on length of pipe line haul to plant at Oil City.

TIDE WATER PIPE CO.
(Effective April 30, 1932)

Bradford, Pa. $2.03
Allegany, N. Y. 2.02

PURE OIL CO.
(Effective April 25, 1932)

Cabin Creek, W. Va. $1.70
Bradford Hollow, W. Va. 1.70
Kelly's Creek, W. Va. 1.70

Texas Panhandle

Gray County, Wheeler County and Carson-Hutchinson Counties.... See gravity table

Rocky Mountain States

OHIO OIL CO.-MIDWEST REFINING CO.
Ilas, light (Aug. 24, 1931) ..... $ .75
Ilas, heavy (Aug. 24, 1931) ..... .53
Fort Collins (April 11, 1932) ..... .86
Florence (April 11, 1932) ..... .80
Wellington (April 11, 1932) ..... .76
Greasewood Dome, Colo. (Apr. 11, 1932) 1.00
Dutton Creek (Apr. 11, 1932) ..... .82
Rock Creek, Wyo. (June 1, 1932) .... .90
Frannie, light (Nov. 2, 1931) ..... .61
Frannie, heavy (Nov. 2, 1931) ..... .51
Salt Creek..... Mid-Continent gravity table
LaBarge..... Mid-Continent gravity scale
Big Muddy (Apr. 11, 1932) ..... .93
Grass Creek (June 1, 1932) 1.10
Elk Basin (June 1, 1932) 1.10
Lance Creek (Apr. 11, 1932) 1.15
Poison Spider (Mar. 5, 1931) ..... .70
Notches (Mar. 14, 1927) ..... .65
Hudson (June 2, 1931) ..... .65
Lander (Mar. 5, 1931) ..... .40
Rex Lake (Feb. 22, 1930) 1.10
Osage (Apr. 15, 1931) ..... .93
Lost Soldier (Apr. 12, 1932) ..... .80
Hamilton Dome (Nov. 3, 1931) ..... .45
Greybull (Apr. 11, 1932) 1.20
Cat Creek (Apr. 11, 1932) 1.20
Pondera (Nov. 3, 1931) ..... .90
Sunburst, Mont. (Apr. 11, 1932) 1.05
Hogback, N. Mex. (Aug. 24, 1931) .... .80
Border, Mont. 1.55
Red Coulee, Alberta 1.55
Lea County, N. Mex. (Apr. 1, 1932)* .. .65
Maljamar (Apr. 11, 1932) ..... .60
Artesia-Jackson (Apr. 11, 1932) ..... .65

Note—Salt Creek, Cat Creek, Dry Creek, Dallas-Derby, Hudson, Greybull, Hogback, and Iles by Midwest Refining Co. and remainder by Ohio Oil Co. Both companies posted Grass Creek light and Elk Basin. Lost Soldier posted by Producers & Refiners Corp. Artesia, Jackson and Maljamar posted by Continental Oil Co. Border and Red Coulee posted by Imperial Refining Co. Lea County posted by Humble Oil & Refining Co. Fort Collins, Wellington, Orchard, Florence, Rattlesnake and Table Mesa by Continental Oil Co. Osage posted by Arro Oil & Refining Co.

*Posted by The Texas Company. Humble Oil & Refining Co. met this price effective April 11.

West Texas

Iatan and Westbrook.. Same as North Texas
Crane, Upton, Crockett, Howard, Glasscock, Mitchell, Ector, Winkler and Pecos Counties* ..... $ .65
Lea County, N. Mex. (See Rocky Mountain States.)
Toborg, Pecos County (Apr. 11, 1932)†.. .55

*Effective April 1, 1932, Magnolia Petroleum Co., The Texas Company. Effective April 11, Humble Oil & Refining Co. and Gulf Pipe Line Co. and Stanolind Oil & Gas Co. in Winkler County. †Shell Petroleum Corp.

Gulf Coast

Grade A and Grade B classifications discontinued by leading buyers.....
.....See gravity table
Jennings, La. (Apr. 11, 1932)* ..... $ .75
Lockport, La... See Gulf Coast gravity table
Refugio, light..... See gravity table
Refugio, heavy (Apr. 11, 1932)‡..... .80
Markham (Apr. 11, 1932)¶.....
.....See Gulf Coast gravity schedule
High Island (Apr. 11, 1932)¶.....
.....See Gulf Coast gravity schedule

*Gulf Refining Co. †Magnolia Petroleum

(Continued on Next Page)

Crude Oil Gravity Table

	Kansas and Oklahoma	North and Central Texas	East Central Texas	Gray County, Texas	Carson and Hutchinson Counties, Texas	Salt Creek and LaBarge, Wyoming	North Louisiana and Arkansas	Gulf Coast (Texas-Louisiana)	Cameron, Meadows, Louisiana	Iowa and Lockport, Louisiana
	1	2	3	4	5	6	7	8	9	10
Below 25 degrees	....	....	$.67	....	....	....	$.68	$.80	$.70	$.80
25-25.9 degrees	....	....	.67	....	....	....	.70	.81	.71	.81
26-26.9 degrees	....	....	.67	....	....	....	.72	.82	.72	.83
27-27.9 degrees	....	....	.67	....	....	....	.74	.83	.73	.85
28-28.9 degrees	....	....	.76	....	....	....	.76	.84	.74	.84
Below 29 degrees	$.76	$.76	....	....	....	$.76	....	....	....	....
29-29.9 degrees	.78	.78	.76	....	....	.78	.78	.85	.75	.85
30-30.9 degrees	.80	.80	.80	....	....	.80	.80	.86	.76	.86
31-31.9 degrees	.82	.82	.82	....	....	.82	.82	.87	.77	.87
32-32.9 degrees	.84	.84	.84	....	....	.84	.84	.88	.78	.88
33-33.9 degrees	.86	.86	.86	....	....	.86	.86	.89	.79	.89
34-34.9 degrees	.88	.88	.88	$.76	$.66	.88	.88	.90	.80	.90
35-35.9 degrees	.90	.90	.90	.78	.68	.90	.90	.91	.81	.91
36-36.9 degrees	.92	.92	.92	.80	.70	.92	.92	.92	.82	.92
37-37.9 degrees	.94	.94	.94	.82	.72	.94	.94	.94	.84	.94
38-38.9 degrees	.96	.96	.96	.84	.74	.94	.96	.96	.86	.96
39-39.9 degrees	.98	.98	.98	.86	.76	.94	.98	.98	.88	.98
40 degrees and over	1.00	1.00	1.00	.88	.78	.94	1.00	1.00	.90	1.00

Note—Magnolia Petroleum Co.'s prices in Oklahoma, North Texas and Central Texas, effective April 1, are the same as above given in Columns 1 and 2, excepting that the schedule begins with below 28 degrees, 67 cents; 28-28.9 degrees, 76 cents. The Empire Pipe Line Co. met the Magnolia prices in Kansas and Oklahoma; the White Eagle Oil Corp. in Kansas and the Pure Oil Co., in Oklahoma.

Column 1—Effective April 1, 1932, Continental Oil Co. in Oklahoma and Kansas; Barnsdall Refineries, Inc., and Standish Oil Co. (Phillips Petroleum Co.), in Oklahoma and Kansas; Skelly Oil Co., Kanotex Refining Co., Derby Oil Co., Vickers Petroleum Co., in Kansas; Magnolia Petroleum Co. and Pure Oil Co., in Oklahoma (see note above); White Eagle Oil Corp., in Kansas (see note above); The Texas Company in Oklahoma. Effective April 11, 1932, Stanolind Crude Oil Purchasing Co. in Oklahoma and Kansas; Gypsy Oil Co., Mid-Continent Petroleum Corp., Champlin Refining Co., Eason Oil Co., Pepper Gasoline Co. and Carter Oil Co. in Oklahoma. Carter Oil Co.'s schedule begins at below 25 degrees, 63 cents, with 2 cents added for each degree upward.

Column 2—Continental Oil Co., effective April 1, in North Texas only; followed on same day by The Texas Company in North and Central Texas; Magnolia Petroleum Co. in North and Central Texas (see note above); effective April 11, the Humble Oil & Refining Co., Gulf Pipe Line Co. and Stanolind Crude Oil Purchasing Co.

Column 3—Effective April 1, 1932, the Magnolia Petroleum Co., effective April 11, 1932, Humble Oil & Refining Co.

Column 4—Effective April 1, 1932, Magnolia Petroleum Co., effective April 2, the Philtex Oil Co. (Phillips Petroleum Co.), but its schedule was carried down to below 30 degrees at 66 cents, with 2 cents added for each degree upward. Effective April 11, other companies met Continental schedule.

Column 5—Effective April 1, 1932, Magnolia Petroleum Co., effective April 2, Philtex Oil Co., excepting that latter company carried its schedule down to below 30 degrees at 56 cents, with 2 cents added for each degree upward. Effective April 11, Continental Oil Co. and Gulf Pipe Line Co. met Magnolia Petroleum Co. prices.

Column 6—Midwest Refining Co., effective April 11, 1932.

Column 7—The Texas Company, effective April 1, 1932; Magnolia Petroleum Co., effective April 6, 1932; Standard Oil Co. of Louisiana, Louisiana Oil Refining Co., Stanolind Oil & Gas Co. (in Pine Island and Pleasant Hill and in Marion County, Texas) and Gulf Refining Co., effective April 11, 1932.

Column 8—The Texas Company, effective April 1, 1932; Sun Oil Co., April 1, 1932; Humble Oil & Refining Co., effective April 11, 1932; Gulf Pipe Line Co., effective April 11, 1932. Gulf's gravity scale ends with a top of 35 and above at 91 cents. Humble Oil & Refining Co., effective July 18, 1932, posted following prices for Conroe crude: 35-35.9 degrees, 90 cents; 36-36.9 degrees, 92 cents; 37-37.9 degrees, 94 cents; 38-38.9 degrees, 96 cents; 39-39.9 degrees, 98 cents; 40 and above, $1.

Column 9—Magnolia Petroleum Co., effective April 6, 1932.

Column 10—Magnolia Petroleum Co., effective April 6, 1932.

(California Crude Oil Prices on Page 31)

TANK WAGON MARKETS

Quotations for gasoline and kerosene in United States, as furnished by the larger marketing concerns, include taxes

August 16, 1932

TAXES

The gasoline quotations given in the following tables include the 1-cent Federal tax as well as state, county and city taxes. The gasoline quoted is the regular or standard grade. In most marketing areas a third or competitive grade is generally available at 1.5 or more cents per gallon under the service station price for the regular grade. Ethyl Gasolines are sold 3 cents above the service station price for the regular grade.

Standard Oil Co. (Indiana)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Chicago	17.1	17.1	4.0	10.0
Decatur, Ill.	17.6	17.6	4.0	10.1
E. St. Louis	16.9	16.9	4.0	9.8
Joliet	17.6	17.6	4.0	10.1
Peoria	17.6	17.6	4.0	10.1
Quincy	17.4	17.4	4.0	9.9
Davenport, Ia.	17.7	17.7	4.0	10.4
Des Moines	17.7	17.7	4.0	10.4
Keokuk	17.7	17.7	4.0	10.4
Sioux City	17.3	17.3	4.0	10.0
Duluth, Minn.	18.7	18.7	4.0	11.0
Mankato	18.3	18.3	4.0	9.7
Minneapolis	18.4	18.4	4.0	11.0
LaCrosse, Wis.	19.4	19.4	5.0	11.1
Milwaukee	17.3	17.3	5.0	10.0
Madison	18.5	18.5	5.0	10.2
Detroit, Mich.	13.6	13.6	4.0	10.6
Grand Rapids	17.5	17.5	4.0	10.3
Saginaw	16.6	16.6	4.0	10.6
Evansville, Ind.	18.2	18.2	5.0	9.9
Indianapolis	18.4	18.4	5.0	10.1
South Bend	18.7	18.7	5.0	10.4
Fargo, N. D.	20.1	20.1	4.0	13.0
Huron, S. D.	19.5	19.5	5.0	11.5
Sioux Falls	19.0	19.0	5.0	11.5
K. C., Mo.*	15.1	15.1	4.0	8.7
Springfield*	17.1	17.1	4.0	8.0
St. Louis*	16.6	16.6	4.0	9.4
St. Joseph*	16.7	16.7	4.0	7.8
Wichita, Kans.	15.9	15.9	4.0	7.0
Bartlesville, Okla.	16.5	18.0	5.0	9.0

*State tax 2 cents, 1-cent city tax and 1-cent Federal tax.

A third grade of gasoline, "Stanolind Blue," is sold at all major points at a price 1½ cents or more below the price on the regular grade shown above.

Effective November 4—New dump discount applicable on all grades of gasoline sold from tank wagon. Any tank wagon customer buying 25 gallons or more at one time will be given 1-cent discount per gallon off tank wagon price at time of delivery. Customers not under contract receive no other discount.

Effective January 1—Discounts on Q.D.A. on 500 gallons or more per month throughout territory; Red Crown Ethyl Gasoline, 3 cents off tank wagon price; Red Crown gasoline, 2½ cents off tank wagon price; Stanolind Blue gasoline, 1 cent off tank wagon price. On deliveries of 75,000 gallons or more each classification allowed 1 cent additional discount.

Discounts on resellers authorized agent's agreement: Same amounts as above except made off service station price instead of tank wagon price.

Stanolind Furnace Oil in Chicago

Effective July 1, 1932, prices f.o.b. Chicago, tank wagon prices: No. 1 (36-40 lt. stw. zero), 100 gallons or more, 6 cents; No. 3 (30-34 stw. zero), 150 gallons or more, 5.50 cents; No. 3 (22-26 zero), 200 gallons or more 4.75 cents; No. 4 (12-16 zero), 400 gallons or more, 4 cents. Viscosity of No. 4, 90-115 at 100° F.

Fuel Oils

Chicago Oil Heat Institute Prices

Spot market prices on 350 gallons or over deliveries, and top prices on contracts, respectively: 38-40, 6 cents and 7½ cents; 32-36, 5½ cents and 7 cents; 28-30 4¾ and 6¼ cents; 24-26, 4¼ cents and 5½ cents; 18-22, 4 cents and 5 cents. On deliveries of less than 350 gallons the spot price is one-half cent higher.

Nebraska

STANDARD OIL CO. (NEBRASKA)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Omaha	16.9	17.9	5.0	10.25
McCook	19.0	19.0	5.0	11.75
Norfolk	18.75	18.75	5.0	10.75
N. Platte	19.0	19.0	5.0	11.5
Scottsbluff	19.0	19.0	5.0	11.25

Note—Dealers' discount allowed as follows: Red Crown Ethyl, 3 cents off station price; Red Crown, 2½ cents off normal service station price; Nebraska Blue (third grade), 1 cent off normal service station price.

Southern District

STANDARD OIL CO. (KENTUCKY)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Atlanta, Ga.*	22.0	22.0	7.0	11.0
Augusta	21.5	21.5	7.0	13.5
Macon	22.0	22.0	7.0	13.0
Savannah	20.0	20.0	7.0	12.5
Birm'ham, Ala.	21.0	21.0	7.0	11.0
Mobile	20.0	20.0	7.0	8.0
Montgomery	20.0	20.0	7.0	13.5
Jackson, Miss.	20.0	20.0	7.0	10.0
Vicksburg	20.0	20.0	7.0	10.5
Jack'ville, Fla.	20.0	20.0	8.0	12.5
Miami	22.0	22.0	8.0	12.5
Pensacola	22.5	22.5	8.0	12.5
Tampa	21.0	20.0	8.0	10.0
Lexington, Ky.	18.5	18.5	6.0	10.5
Covington	19.0	19.0	6.0	10.5
Louisville	18.0	18.0	6.0	10.5
Paducah	19.5	19.5	6.0	8.0

A third grade "Kyso Green" is sold at a price generally 2 cents below the price on the regular grade.

In addition to the state tax of 4 cents on gasoline, Montgomery has city and county tax of 2 cents on gasoline and one-half cent on kerosene. Kerosene prices in Georgia include 1-cent tax. In Florida, an inspection fee of 0.125 cent; in Alabama, an inspection fee of one-half cent on kerosene and one-fortieth cent on gasoline. To Pensacola Montgomery and Birmingham state taxes add 1-cent tax. To Mobile state tax add 1-cent city tax. Dealers receive discount of 3 cents off tank wagon price throughout territory.

Rocky Mountain District

CONTINENTAL OIL CO.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Denver, Colo.	18.0	21.0	5.0	12.5
Pueblo	18.0	21.0	5.0	12.5
Grand Jctn.	20.0	23.0	5.0	14.5
Casper, Wyo.	17.0	20.0	5.0	10.0
Cheyenne	18.0	21.0	5.0	11.5
Butte, Mont.	20.0	23.0	6.0	17.0
Billings	23.0	26.0	6.0	15.5
Great Falls	23.0	26.0	6.0	17.0
Helena	23.0	25.0	6.0	17.0
Salt Lake, Utah	18 0	21.0	5.0	16.0
Albu'que, N. M.	18.0	21.0	*7.0	14.0
Boise, Idaho	22.5	25.5	6.0	18.0
Twin Falls	22.5	25.5	6.0	18.0

*One-cent city tax.

Southwestern District

MAGNOLIA PETROLEUM CO.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Dallas, Tex.	15.5	18.0	5.0	7.0
Fort Worth	16.5	18.0	5.0	9.0
Houston	15.5	18.0	5.0	10.0
San Antonio	15.5	18.0	5.0	9.0
El Paso	15.5	19.0	5.0	12.0
Texarkana	*19.5	*19.5	5.0	†11.0
Muskogee, Okla.	14.5	17.0	5.0	8.0
Okla. City	14.5	17.0	5.0	8.0
Tulsa	15.5	18.0	5.0	8.0
Ft. Smith, Ark.	*17.0	17.0	7.0	†9.0
Little Rock	*19.0	*19.0	7.0	†11.0

One-cent rebate made from posted station prices to cash purchasers in Louisiana, Arkansas and Tennessee.

*Less 3½ cents to dealers. †Less 2 cents to dealers.

Central South District

STANDARD OIL CO. (LOUISIANA)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
N. Orleans, La.	18.0	18.0	*7.0	†11.0
Baton Rouge	17.0	17.0	6.0	†10.0
Alexandria	18 5	18.5	*7.0	†10.0
Lafayette	18.0	18 0	*7.0	†10.0
Lake Charles	18.5	18 5	*7.0	†10.0
Shreveport	16 5	16 5	6 0	†10.0
Knoxville, Tenn.	21.5	21.5	8.0	11.5
Memphis	18 0	18.0	8 0	9.0
Chattanooga	21 5	21.5	8 0	11.5
Nashville	21.0	21.0	8 0	11.0
Bristol	22 0	22.0	8.0	12.0
Lt. Rock, Ark.	18.5	18.5	7.0	9.0

*Includes city tax of 1 cent. †Louisiana kerosene prices include 1-cent state tax. New Orleans kerosene price also includes 1-cent city tax.

†Kerosene prices in Louisiana include 1-cent tax except New Orleans where tax is 2 cents.

Two-cent discount off gasoline and kerosene tank wagon price to dealer and commercial accounts.

Pennsylvania-Delaware and Part of New England

ATLANTIC REFINING CO.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Pittsburgh, Pa.	17.5	18.5	4.0	11.0
Philadelphia	16.5	17.5	4.0	11.0
Scranton	17.5	18.5	4.0	11.0
Allentown	17.5	18.5	4.0	11.0
Altoona	17.5	18.5	4.0	11.4
Erie	17.5	18.5	4.0	11.0
Dover, Del.	17.5	18.5	4.0	11.0
Wilmington	17.5	18.5	4.0	11.0
Springf'd, Mass.	17.5	18.5	4.0	8.0
Worcester	17.5	18.5	4.0	8.0
Boston	13.5	14.5	4.0	8.0
Providence, R.I.	12.5	13.5	3.0	9.0
Hartford, Conn.	16.5	17.5	3.0	8.0
New Haven	16.5	17.5	3.0	8.0

Atlantic Coast District

STANDARD OIL CO. (NEW JERSEY)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Atl'tic City, N.J.	16.9	17.9	4 0	11.2
Newark	16.2	17.2	4.0	8.5
Annapolis, Md.	18.5	19.5	5.0	10.0
Baltimore	17.9	18 9	5.0	7.0
Cumberland	19.4	20.4	5.0	11.7
Wash'g'n, D. C.	16.4	17.4	3.0	10.0
Danville, Va.	20.6	21.6	6 0	11.9
Norfolk	19.0	20 0	6.0	10.2
Petersburg	20.1	21.1	6.0	11.4
Richmond	19.4	20.4	6.0	10.7
Roanoke	20 6	21.6	6.0	11.9
Charles'n, W.Va.	19.3	20.3	5.0	11.6
Parkersburg	17.9	18.9	5 0	10.2
Wheeling	18.9	19.9	5.0	11.2
Charlotte, N. C.	22.2	22.2	7.0	12.5
Hickory	22.4	22.4	7.0	12.7
Mt. Airy	22.5	22.5	7.0	12.8
Raleigh	22.0	22.0	7.0	12.3
Salisbury	22.3	22.3	7.0	12.6
Charleston, S.C.	20.0	21.0	7.0	10.3
Columbia	21 9	21.9	7.0	12.2
Spartanburg	22.2	23.2	7.0	12.5

Two cents per gallon discount off tank wagon price of gasoline to dealers except Washington, D. C., and States of Maryland and New Jersey, where discount is 3 cents. Kerosene 1 cent off tank wagon for 25 gallons or more under contract except New Jersey.

Pacific Coast Territory

STANDARD OIL CO. OF CALIFORNIA*

	Gasoline			Kero.
	Tank truck†	Posted retail	Incl'ds tax	tank wagon
Fresno	19.5	18.5	4.0	17.0
San Francisco	19.0	18.0	4.0	15.5
Los Angeles	18.5	17.5	4.0	15.5
Reno, Nev.	25.0	24.0	5.0	19.0
Portland, Ore.	21.0	20.0	5.0	16.5
Seattle, Wash.	22.0	21.0	6 0	16.5
Tacoma	22.0	21.0	6.0	16.5
Spokane	25.5	24.5	6.0	20.5
Phoenix, Ariz.	19.5	21.5	6.0	20.5

†Above prices are at company's plant or depots as company does not operate stations. A 4-cent per gallon discount is given dealers and customers taking tank wagon lots except in Phoenix where the discount is 1 cent.

*Retail prices posted by Standard Stations, Inc., a subsidiary.

New York and Part of New England District

STANDARD OIL CO. (NEW YORK)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Albany, N. Y.	17.0	18.0	4.0	9.0
New York	14.5	14.5	4.0	9.5
Buffalo	17.5	18.5	4.0	9.0
Rochester	17.5	18.5	4.0	9.0
Syracuse	17.5	18.5	4.0	9.5
Boston, Mass.	14.5	14.5	4.0	8.0
Augusta, Me.	18.0	19.0	4.0	9.0
Manch'tr, N. H.	17.5	18.5	5.0	8.0
Burlington, Vt.	18.5	19.5	5.0	8.5

Naphtha

	Tank wagon	Tank car
Oleum spirits	10.7	6.22
V.M.P. naphtha	12.7	7.22
Cleaners' naphtha	15.2	9.22
Stanisol	15.2	9.22

Tank wagon prices f.o.b. Chicago January 6, 1932. Each of above prices subject to discount of 1 cent per gallon for 150-gallon lots if covered by contracts.

Ohio

STANDARD OIL CO. (OHIO)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Ohio points	18.0	18.5	5.0	*12.0

Dealers and commercial accounts 2 cents under tank wagon.

*Service station price 13 cents.

TANK WAGON CHANGES

Standard Oil Co. of Louisiana effective August 6 reduced gasoline tank wagon and service station prices throughout territory one-half or more cents per gallon.

Standard Oil Co. (Indiana) effective August 10 reduced gasoline tank wagon and service station prices 1 cent per gallon.

Standard Oil Co. (Kentucky) effective August 5 reduced gasoline tank wagon and service station prices at Tampa, Fla., from 21 to 20 cents. Same company effective July 27 established gasoline tank wagon and service station prices

(Continued on Page 31)

Crude Oil Prices

(Continued from Preceding Page)

Co. ‡Humble Oil & Refining Co. §The Texas Company. ¶Yount Lee Pipe Line Co.

North Louisiana and Arkansas

Smackover, Ark. (all grades)	$ .45
Urania, La. (Apr. 12, 1932)	.40
East El Dorado, Ark. (Apr. 6, 1932)	.45
Stephens, Ark., below 29° (Apr. 12, 1932)	.61
Stephens, Ark., 29° and above (Apr. 12, 1932)	.64
Other fields	See gravity table

Note—Smackover, all grades, The Texas Company, April 1, 1932; Magnolia Petroleum Co., April 6, 1932; Standard Oil Co. of Louisiana, Gulf Refining Co. and Louisiana Oil Refining Co., April 11, 1932. Urania posted by H. L. Hunt, Inc., and Louisiana Oil Refining Co.; East El Dorado by Magnolia Petroleum Co., effective April 6, 1932; by Gulf Refining Co., effective April 11, 1932; Stephens, Ark., by Louisiana Oil Refining Co. and Atlantic Oil Producing Co.

South Central and Southwest Texas

Darst Creek (Apr. 1, 1932)*	$ .75
Luling (Apr. 1, 1932)*	.64
Mirando (Apr. 1, 1932)*	.90
Pettus (Apr. 11, 1932)‡	1.00
Salt Flat (Apr. 11, 1932)‡	.75
Thrall§	
Lytton Springs (Lockhart) (Apr. 1, 1932)*	.64
Dobrowolski§	
Same as Mid-Continent gravity scale up to and including 38-38.9°	
Somerset¶	
Same as Mid-Continent gravity scale up to and including 38-38.9°	

*Magnolia Petroleum Co., The Texas Company, Humble Oil & Refining Co. posted 50 cents for Mirando, April 11. §Thrall price same as North Central Texas less 19½ cents per cwt. freight. ¶Grayburg Oil & Refining Co., Pioneer Oil & Refining Co. and Texas Petroleum Products. ‖Pioneer Oil & Refining Co. ‡Humble Oil & Refining Co.

Middle Western States

OHIO OIL CO.
(Effective April 11, 1932)

Lima	$1.15
Wooster	1.25
Illinois	1.10
Indiana	.75
Princeton	1.10
Plymouth	Shut in
Western Kentucky	1.05
Midland, Mich. (July 13, 1932)*	.85
Muskegon (July 14, 1932)†	Mid-Continent gravity scale
Muskegon (June 30, 1932)‡	.85
Somerset, Ky. (Apr. 25, 1932)	.85
Hart County, Ky. (June 16, 1932)§	1.00

*Posted by Pure Oil Co. Old Dutch Refining Co. pays 20 cents per barrel over Pure Oil Co.'s posted price. †Naph-Sal Refining Co. ‡Old Dutch Refining Co. §Posted by Stoll Refining Co. Somerset, Ky., crude purchased by Ashland Refining Co., Ashland, Ky., and delivered through own pipe line.

Mexico

Panuco*	$0.45

*F.o.b. ship, based on June transactions and exclusive of production and export taxes and bar dues.

Canada

Ontario (Nov. 3, 1931):	
Petrolia*	$1.90
Oil Springs*	1.97
Alberta (Apr. 22, 1932):	
Turner Valley†:	
Crude oil 40-44.9	1.54
Crude oil 45-45.9	2.18
Crude oil 50 and above	2.80
Crude naphtha	3.33
Discolored naphtha	2.05

*Imperial Oil, Ltd. †Imperial Oil, Ltd. and Regal Oil & Refining Co.

NEWS FOR SALES DEPARTMENTS

Two Companies to Start Marketing Of Synthetic Oil

Two Standard Oil companies this week are announcing the sale of synthetic lubricating oils developed by their refining departments over the past year.

The Standard Oil Co. of New Jersey and some of its subsidiary marketing companies effective August 18 will start marketing a motor oil to be known as "Essolube." This product is manufactured by the company's hydrogenation plant located at Bayway, N. J. A special article by A. E. Mockler in this week's issue explains this development.

The Standard Oil Co. (Indiana) is offering a high priced oil to be known as Syntholube which was developed by its research and development department. This oil was announced to the scientific world at a meeting of the American Chemical Society more than a year ago as a triumph in making synthetically a better oil than could be taken from natural crude oil by refining methods.

The company has accordingly begun stocking the synthetic oil in sealed 5-gallon drums at super-greasing stations and a few service stations in select neighborhoods where fine cars circulate. The drums will sell at $10 each which is the equivalent of 50 cents a quart. No amount less than a drum will be sold. Attendants will fill crankcase from the drums, but will drain and clean out any other oil before doing so. Since the supply is limited, no effort will be made to push sales in the usual way. The company will, however, feature the oil at the selected stations as the last word in motor oils and worth the higher price to those willing to pay.

Made From Wax

An especially interesting fact about the synthetic oil is that it is made from paraffin wax, an element of crude petroleum that oil companies have spent millions of dollars to find ways of removing from ordinary motor oils. The paraffin is not a constituent of the new product, however, but the raw material from which the synthetic oil is manufactured. In the process, the paraffin molecules are broken up and actually rebuilt to make particular kinds of hydrocarbons that research has demonstrated possess lubricating properties in a superlative degree.

The unusual qualities claimed for the oil are that it undergoes relatively little change of body with changes of temperature, it will still pour or flow through the pump at temperatures of 20 to 25 degrees below zero, it has exceptionally low carbon-forming tendencies, and it will not oxidize and deposit sludge even under the most severe conditions. If it could be kept free from road dirt there would be practically no need of ever renewing or changing this oil, its originators claim. It is an all-year oil, suitable for use in either summer or winter.

FUEL OIL TAX DEFERRED

CHATHAM, Ontario, Aug. 13.—Announcement was made this week by Hon. G. S. Henry, premier of Ontario, that the Fuel Oil Tax Act passed at the 1932 session of the provincial legislature will not be made operative in Ontario this winter. The act provided for a tax of one-half cent a gallon on all fuel oil consumed in the province. The act was planned as an emergency measure in case of financial shortage, and it is stated that increased revenues from other sources, including motor licenses and gasoline tax, have rendered it unnecessary for the time being.

Texas Department Not to Change Road Oils and Specifications on Asphalt

The state highway department of Texas during the coming year expects to use road oils and petroleum asphalts of practically the same specifications at last year, according to an official announcement. It is possible that the highway department will change the specifications on asphaltic products of more than 300 penetration to conform with the proposed scheme of analysis now in the process of being worked out by the various states in co-operation with the Bureau of Public Roads. In the event this change of method of specifying is made, the highway department does not contemplate any radical change in the nature of the materials involved.

Last year the State used the following oils:

	Metal drums (tons)	Tank cars
OA-35	32	..
OA-55	186	42
OA-90	4,490	10
OA-135	....	22
OA-230T	201	637
RO-3	25	224
RO-2	518	78
RO-2A	....	28
RO-1	....	48
RO-Special	....	1
Flux oils	....	63
Cut back asphalt	65	124
Total	5,517	1,328

RO-2 as shown in the above tabulations is practically equivalent to and has been superseded by RO-3. The flux oils shown in the above tabulation are either special specifications or merely asphaltic base oil with a minimum of 50 per cent asphalt of 100 penetration. Following are the specifications on OA-45-T, OA-90, OA-135, OA-230T, OA-55, RO-1, RO-3, C.B.L. and C.B.M.:

OA-45—Oil Asphalt

The material shall be homogeneous, free from water, shall not foam when heated to 175° C. (347° F.) and shall meet the following requirements:

		Min.	Max.
1.	Penetration at 25° C. (77° F.) 100 gm., 5 sec.	40	50
2.	Penetration at 0° C. (32° F.) 200 gm., 60 sec.	20	..
3.	Ductility at 25° C. (77° F.) cms.	40	..
4.	Flashpoint, °C.	232	..
5.	Melting point, °C.	45	60
6.	Loss at 163° C. 5 hrs. %	..	1.0
7.	Penetration of residue 25° C. 100 gm., 5 sec.	25	..
8.	Solubility in CS_2 %	99.5	..
9.	Solubility in CCl_4 %	99.5	..

OA-55—Oil Asphalt

The material shall be homogeneous, free from water, shall not foam when heated to 175° C. (347° F.) and shall meet the following requirements:

		Min.	Max.
1.	Penetration at 25°/25° C. 100 gm. 5 sec.	50	60
2.	Penetration at 0°/0° C. 200 gms. 60 sec.	22	..
3.	Ductility at 25°/25° C. cms.	50	..
4.	Flashpoint, °C.	232	..
5.	Melting point, °C.	45	60
6.	Loss at 163° C. 5 hrs. %	..	1.0
7.	Penetration of residue 25°/25° C.	30	..
8.	Solubility in CS_2 %	99.5	..
9.	Bitumen soluble in CCl_4 %	99.5	..

OA-90—Oil Asphalt

The material shall be homogeneous, free from water, shall not foam when heated to 175° C. (347° F.) and shall meet the following requirements:

		Min.	Max.
1.	Penetration at 25°/25° C. 100 gm. 5 sec.	85	100
2.	Penetration at 0°/0° C. 200 gms. 60 sec.	30	..
3.	Ductility at 25°/25° C. cms.	50	..
4.	Flashpoint, °C.	232	..
5.	Melting point, °C.	45	60
6.	Loss at 163° C. 5 hours %	..	1.0
7.	Penetration of residue 25°/25° C.	50	..
8.	Solubility in CS_2 %	99.5	..
9.	Bitumen soluble in CCl_4 %	99.5	..

OA-135—Oil Asphalt

The material shall be homogeneous, free from water, shall not foam when heated to 175° C. (347° F.) and shall meet the following requirements:

		Min.	Max.
1.	Penetration at 25°/25° C. 100 gm. 5 sec.	120	150
2.	Penetration at 0°/0° C. 200 gm. 60 sec.	36	..
3.	Ductility at 25°/25° C. cms.	50	..
4.	Flashpoint, °C.	232	..
5.	Melting point, °C.	40	60
6.	Loss at 163° C. 5 hrs. %	..	1.5
7.	Penetration of residue at 25°/25° C.	70	..
8.	Solubility in CS_2 %	99.5	..
9.	Bitumen soluble in CCl_4 %	99.5	..

OA-230T—Oil Asphalt

The material shall be homogeneous, free from water, shall not foam when heated to 175° C. (347° F.) and shall meet the following requirements:

		Min.	Max.
1.	Penetration at 25° C. (77° F.) 100 gm. 5 sec.	210	250
2.	Penetration at 0° C. (32° F.) 200 gms. 60 sec.	50	..
3.	Ductility at 25° C. (77° F.) cms.	50	..
4.	Flashpoint, °C.	232	..
5.	Melting point, °C.	30	50
6.	Loss at 163° C. 5 hrs. %	..	2.0
7.	Penetration of residue 25° C. (77° F.)	125	..
8.	Solubility in CS_2 %	99.5	..
9.	Bitumen soluble in CCl_4 %	99.5	..

RO-1—Road Oil

The oil shall be the product of an asphaltic base oil. It shall be either a naturally homogeneous oil, or a homogeneous residue of oil. It shall not have been distilled at a temperature high enough to injure the oil by burning, or to produce any carbonaceous matter, and shall not be obtained by the blending of various grades of oil, or the addition of solid asphalt to lighter oils or distillates.

It shall meet the following tests:

55-70 per cent asphaltic residue having a penetration of 100 at 77° F.
Specific gravity 77° F.—0.95 minimum.
Flashpoint—not less than 175° F.
Specific viscosity (Engler) at 122° F.—25, 40.
Loss—20 gr.—5 hours at 212° F. 1-12 per cent.
Water and sediment—not to exceed 1 per cent.
Solubility CS_2—minimum 99.5 per cent.

RO-3—Road Oil

The oil shall be the product of an asphaltic base oil. It shall be either a naturally homogeneous oil, or a homogeneous residue of oil. It shall not have been distilled at a temperature high enough to injure the oil by burning, or to produce any carbonaceous matter, and shall not be obtained by the blending of various grades of oil, or the addition of solid asphalt to lighter oils or distillates.

It shall meet the following tests:

Asphalt content of 100 penetration at 77° F.	65 to 80%
Specific gravity 77° F.	0.95 min.
Flashpoint—not less than	225° F.
Specific viscosity (Engler) at 122° F.	100 to 160
Loss—20 gr.—5 hrs. at 212° F.	0-6%
Water and sediment—not to exceed	1.0%
Bitumen soluble CS_2	99.5%

Special Cut-Back Asphalt Surfacing Material—Light

This material shall be a cut-back as-

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Expand Facilities At Panama Canal to Handle Diesel Fuel

The Panama Canal has completed the installation of additional facilities for handling Diesel oil at the Cristobal cargo docks in order to take care of the fueling requirements of the increasing proportion of motorships calling at that port. A new 10-inch line has been laid from the Mount Hope oil handling plant to the cargo docks, with outlets for delivering Diesel oil extended entirely around Pier 7 and on the south side of Pier 8. The new outlets will permit ships to receive Diesel oil while handling passengers and cargo and will eliminate the necessity of transferring to Dock 16 to take oil.

During the fiscal year ended June 30, 1932, the transits of motorships through the Panama Canal formed about 32 per cent of the total passages. In the fiscal year 1931, they were 28.4 per cent. The proportion has increased each year for a number of years. As late as 1925, the transits of motorships were only 6 per cent of the total. With other traffic, motorship transits have declined in actual numbers in the last year, but their proportion in the traffic increased.

The Cristobal cargo docks are also served by two 12-inch fuel oil lines for the convenience of oil burning steamers. Other improvements in the oil handling situation at Cristobal include the provision at the coal handling plant of a discharge berth for tankers and for fueling there, ships not handling cargo or passengers. The dock there is now provided with facilities for bunkering vessels with oil as well as coal, but the installation of pipes enabling the unloader side of Dock 16 to be utilized for the discharge of tankers as well as colliers will not be completed for some time.

During June, 1932, 66 tankers passed through the Panama Canal with an aggregate net tonnage of 386,904. Cargo amounted to 365,450 tons, comprised of 358,950 tons of mineral oils and 6,500 tons of cocoanut oil. In point of net tonnage, tanker traffic increased 36.9 per cent compared with the corresponding month of 1931, while cargo tonnage increased 31.8 per cent. Tankers carried 26 per cent of the total cargo through the canal during June.

TRUCKS LARGE GAS USERS

Taxes paid by trucks and buses in 1931 totaled $293,000,000, or more than 28½ per cent of the collections from all motor vehicles in the United States, the National Automobile Chamber of Commerce reports in its yearbook, "Facts and Figures of the Automobile Industry." These commercial vehicles represented less than 13½ per cent of all vehicles in operation.

Gasoline taxes accounted for the biggest portion of the truck payments to state and local governments, amounting to approximately $144,530,000. Registration fees for trucks approximated $77,000,000 and the gas taxes and license fees paid on buses were $31,775,000.

In addition, personal property assessments on rolling stock and special municipal tax claimed $40,000,000 of the commercial vehicle operators' income.

WHITE STAR AT LANSING

The White Star Refining Co., Detroit, has made Lansing, Mich., a divisional headquarters and has authorized a new garage and remodeling of quarters to provide offices, both to be started immediately.

NEWS FOR PETROLEUM REFINERS

Refiners at Oil City Order Improvements

OIL CITY, Pa., Aug. 15.—Improvements calling for expenditures totaling more than $100,000 will be started in the refineries of the Quaker State Oil Refining Corp., Wolverine-Empire Refining Co. and Continental Refining Co., all of which operate plants in or near this city.

Quaker State plans to construct a topping plant, preliminary work on which is already under way, while the Wolverine project includes an addition to the present boiler house and the installation of a 500 horsepower boiler and complete stoking equipment. The Continental will spend its sum for the installation of new boilers.

The Wolverine-Empire project will get under way at once, it was stated by company officials, and in addition to the building addition and new boiler and stoker system, a complete new automatic fuel conveyor system will be installed.

The company now has a battery of six boilers in the plant at Reno and the coal storage bin at the present time is on the ground. Installation will greatly facilitate the handling of the fuel and will give the plant a thoroughly modern and efficient fuel system.

Announce Plans to Enlarge Three Refineries in Italy

NEW YORK, Aug. 13.—Soc. per l'Industria Italiana del Petrolio (Royal Dutch-Shell), Soc. Benzina Italiana, subsidiary of Petrofina of Brussels, and Soc. Distillazione Italiana Combustibili, controlled by Azienda Generale Italiana Petroli, the Italian government oil agency, have filed application with the Italian government to double the capacities of their plant.

Soc. per l'Industria has two cracking units with 1,400 bbls. daily capacity at its refinery at Spezia. Soc. Benzina Italiana has similar cracking capacity at its Naples plant, and the government refinery has one 600-bbl. cracking unit at Venice. All three companies are subsidized by the government by exemption from import taxes on crude and preferential domestic tax treatment, the Italian government receiving a percentage of the profits.

HIGHER RATES IN NORTHWEST

SALT LAKE CITY, Utah, Aug. 13.—Advances averaging 20 per cent of the present freight rate on oil is being sought by the railroads operating in the northwestern states. The proposed rates would amount to close to 1 cent per gallon and would necessitate additional transportation costs aggregating $1,000,000 annually. This the representatives of refiners and oil marketers contend is unreasonable. The hearing before the commission will be concluded here within a few days and oral arguments will be heard in Washington some time in October.

BUYS RUSSIAN CRUDE OIL

NEW YORK, Aug. 13.—Joseph Elie & Co., Ltd., owners of the new LaSalle Refining Co., which is just completing a new refinery at Montreal East, Canada, has contracted with the Soviet for six cargoes of crude, aggregating approximately 405,000 bbls., for delivery during the next two months.

Initial shipments, it is understood, are now afloat for Montreal, and deliveries will be hastened to get the crude to its destination before the St. Lawrence is closed to navigation for the winter. The LaSalle refinery has considerable crude storage capacity.

Increasing Imports of Crude Oil Reflect Expansion of French Plant Capacity

Imports of crude petroleum in France during the first half of 1932 were 31 per cent higher than in the corresponding 1931 period, the increased quantities being received principally from the United States, with Ecuador also showing an important increase.

The gain in crude oil imports reflects the French efforts to supply its local market with products refined within the country. By the decree of April 1, 1931, a number of companies were authorized to import the crude oil necessary to manufacture the petroleum products which the companies, at the same time, were authorized to market. By the terms of the decree, all of the companies receiving import authorization were required to have refineries in operation by October 1, 1934. The program contemplated the ultimate production in France of approximately 23,000,000 bbls. of petroleum products annually, roughly divided into: Gasoline, 16,350,000 bbls.; kerosene, 2,000,000 bbls.; lubricating oils, 2,650,000 bbls., and gas oil, 2,000,000 bbls.

At the time of the decree, three refineries were operating in France, two of long standing and one of more recent origin. The two which had been operated over a long period of years were the Pechelbronn refinery and the Courchelettes refinery of the Societe Generale des Huiles de Petrole (Anglo-Persian), while the more recent plant was that of La Societe Jupiter (Royal Dutch-Shell) at Petit Couronne.

The Pechelbronn refinery, located about 30 miles north of Strasbourg, operates largely on crude produced from its own concessions, but imports a small additional amount of foreign crude. It was the first French refinery to utilize cracking, erecting Wolf-Carburol equipment. During 1931, 110,325 metric tons of crude oil (about 800,000 bbls.) were refined, producing approximately 115,000 bbls. of gasoline, 152,000 bbls. of kerosene, 65,000 bbls. of gas and fuel oil, 260,000 bbls. of lubricating oils, 16,190 metric tons of coke and asphalt, and 1,811 metric ton of wax.

The Courchelettes refinery is near Douai, about 70 miles inland from the North Sea. It operates on Persian crude, brought by tanker to Dunkerque and then shipped by tank car to the refinery. The refinery treats about 1,400,000 bbls. of crude oil annually. It was originally constructed as a coal distillation plant, but made experimental runs with American crude oil as early as 1865. It was not converted to an oil refinery until 1883. The first tanker, with American oil, arrived in 1885. In September, 1914,

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Government Report Shows Large Gain in Road Oil Sales at Lower Prices

Petroleum refining companies in the United States sold 5,578,446 bbls. of road oil in 1930 and 7,170,102 bbls. in 1931, according to statistics compiled by the Bureau of Mines, Department of Commerce. Although the quantity of road oil sold was 28.5 per cent larger in 1931 than in 1930, the value obtained by this sale was 6.3 per cent less, because of lower prices prevailing in 1931. Petroleum refineries in the United States obtained $7,410,789 from the sale of road oil in 1930 and $6,944,320 in 1931. The average sales value was $1.328 per barrel in 1930 and $0.969 in 1931, a decrease of 37 per cent.

Five-sixths of the road oil manufactured in 1930 and more than nine-tenths in 1931 was made from domestic crude. Little more than half as much road oil was made from imported crude in 1931 as in 1930. From 905,876 bbls. in 1930, the quantity made from Venezuelan and Mexican raw material decreased to 469,948 bbls. in 1931. More than three-fourths of the road oil of foreign origin was made in refineries of the Atlantic Seaboard and the rest in Gulf Coast refineries of Louisiana and Texas.

Three-fourths of the road oil sold in the United States in 1930 and 1931 came from three refining districts: The Indiana-Illinois, the California, and the East Coast districts. Sales of road oil by California refineries increased slightly from 1930 to 1931; but sales by Indiana-Illinois refineries were 24.5 per cent larger in 1931 than in 1930; and sales by East Coast refineries 42.4 per cent larger. The greatest increase in road oil sales, both absolutely and proportionally, was in the Rocky Mountain district.

Prices of road oil were considerably lower in 1931 than in 1930. The greatest decrease in value was in the East Coast district, where the average sale value declined from $1.891 a barrel in 1930 to $1.273 a barrel in 1931. In California the average sales value decreased from $1.144 per barrel in 1930 to $0.837 a barrel in 1931. In the Indiana-Illinois district road oil sold for $1.056 per barrel in 1930, and $0.935 per barrel in 1931.

ROAD OIL SOLD BY PETROLEUM REFINERIES IN THE UNITED STATES, 1930-1931, BY DISTRICTS

District—	1930 Barrels	1930 Value	1931 Barrels	1931 Value
East Coast	719,046	$1,359,714	1,023,830	$1,302,827
Appalachian	88,667	149,522	209,667	240,309
Indiana and Illinois	1,507,437	1,969,530	2,250,744	2,104,650
Oklahoma, Kansas and Missouri	367,585	351,693	801,067	656,117
Texas: Gulf Coast	463,451	1,089,464	83,258	103,480
Rest of State	155	102	1,362	2,825
Total Texas	463,606	1,089,566	84,620	106,305
Louisiana-Arkansas: Louisiana Gulf Coast	132,405	215,836	110,355	124,156
N. Louisiana and Ark.	23,860	48,909	81,934	39,859
Total La. and Ark.	156,265	266,436	192,289	164,145
Rocky Mountains	165,374	213,296	795,277	853,594
California	1,810,526	2,071,832	1,812,608	1,516,373
Grand total	5,578,446	7,410,789	7,170,102	6,944,320

Associated Petroleum to Operate Allen Plant

The Associated Petroleum Corp. of Oklahoma, with Victor H. Smith, president, and John B. Foster, vice president, has been formed and will take over the operation of the 6,000-bbl. refinery in Allen, Okla., formerly operated by the White Oak Corp. This plant has been idle for several months and the new company is now in the process of making minor repairs and changes for the purpose of resuming operations early in September.

The refinery will be supplied with crude from the Oklahoma City and Seminole Pools. An agreement has been reached with the Independent Pipe Line Co., a subsidiary of the Phillips Petroleum Co., to transport crude from the Oklahoma City Field to Seminole where the Associated Petroleum Corp. will pick it up and transport it to the plant through the company's own 6-inch line.

Victor Smith is well known in Mid-Continent refinery circles, having formerly been an officer in the Gulf States Oil Corp. and more recently associated with the Coastal Petroleum Co. Mr. Foster is also well known as a producer and as head of the Foster Oil Co. and Signal Oil Co. Executive and operating offices of the new company have been established in the Beacon Life Building in Tulsa.

Canadian Gasoline Imports Show Loss of 8.5 Per Cent

Canadian imports of gasoline declined 8.5 per cent during the first six months of 1932, compared with the similar 1931 period, according to the Dominion Bureau of Statistics at Ottawa. Receipts from the United States declined 16.6 per cent, while shipments from the Dutch West Indies increased.

Canada received 899,830 bbls. of gasoline from the United States during the first half of 1931 and 750,857 bbls. during the 1932 period, a decrease of 148,973 bbls. Shipments from the Dutch West Indies increased from 127,095 bbls. in 1931 to 193,171 bbls. in 1932. Receipts of natural gasoline, all from the United States, dropped from 421,047 bbls. in 1931 to 298,259 bbls. during the 1932 half year, a decline of 29 per cent.

Crude oil imports into Canada declined 381,221 bbls., or 2.9 per cent. Receipts from the United States, Peru and Venezuela increased, while shipments from Colombia and Trinidad declined.

CANADIAN CRUDE OIL IMPORTS. JANUARY-JUNE

Source—	1932 (bbls.)	1931 (bbls.)
United States	9,787,912	9,289,704
Trinidad	60,098	66,676
Colombia	466,739	1,900,843
Peru	1,701,323	1,351,647
Venezuela	869,023	657,436
Total	12,885,095	13,266,306

FRENCH BUY RUSSIAN CRUDE

NEW YORK, Aug. 13.—A combine of 11 independent French oil companies, of which French Petrofina is the leading interest, has signed a contract with the Soviet naphtha syndicate for its total requirements of crude and products for a five-year period, commencing this year.

The quantities involved in the contract are not specified in the reports received here, but the French group have agreed "not to cede to a third party charges or advantages which might result from the contract without mutual agreement." The contract, the agreement concludes, "consolidates the relations between the Russian oil industry and the independent French consumers and refiners of oil participating in the syndicate."

NATURAL GASOLINE MANUFACTURE

Unit Operation of Panhandle Offered to Solve Problems

AUSTIN, Tex., Aug. 15.—A unit plan of operating gas properties in the Panhandle Field of Texas, whereby gas will be taken by the existing pipe lines from all properties in proportion to the respective interest in the field promises to be the logical solution of the problem of idle gasoline plants there. It also satisfies the question of possible waste under any other arrangement and an equitable return to owners of royalties.

This was the general conclusion drawn from the meeting here August 10 of independent producers, engineers of pipe line companies and representatives of the Texas Railroad Commission.

E. V. Foran, petroleum engineer for the Texas Railroad Commission, will act as chairman of a committee to be made up of representatives of independent producers, pipe line companies and royalty owners interested in this area and the committee has been charged with the responsibility of working out some sort of equitable operating agreement. This committee has been asked to report to the railroad commission at a meeting to be held in Amarillo on August 29 and to have a tangible plan worked out by that time. It is possible that a complete plan can not be worked out in that time as Mr. Foran stated that a complete survey of the entire area and a working out of all problems involved would require about eight months' time.

At this point a temporary arrangement was suggested but the general feeling existed that all efforts should be made toward the formation of a permanent plan and to spend time formulating a temporary plan would retard the final one.

A plea was made to all persons interested in which they were asked to cooperate with the committee and when hesitancy was shown on the part of some, due to the possible future troubles which might arise through the strictest interpretation of the Sherman antitrust laws, Commissioner Thompson said that when a plan was agreed upon the commission would issue an order placing the plan in effect and that the commission's order would relieve all parties of responsibility under the accepted arrangement.

Also, if during the time required to make the survey, individuals attempt to disturbe the status quo of the field, it will be possible for the commission to order all operations ceased until an agreement is reached. There are other powers within reach of the commission that can hasten an agreement and apparently every effort will be made to solve this problem early and equitably.

Natural gasoline plant operators and those companies having idle plants in the area will probably be able to operate under a definite schedule and the residue gas will probably be taken by the pipe lines. This, however, are matters to be worked out by the committee.

Members of the committee are: E. V. Foran, chairman; J. M. McDonald, railroad commission deputy supervisor; J. E. Thompson, Jr., L. M. Bolton, R. L. Wright, Ed Dunigan, Mark Watson, J. C. Dickinson, C. J. Fowlerston, Lawrence Hagy, T. C. Craig, H. W. Price, Ed Warren and M. T. Johnson.

The commission heretofore granted a stripping permit to Hagy, Harrington and Marsh, for wells that have no outlet. Commissioner Thompson said applications were pending for 16 of the stripping permits.

Natural Gasoline Stocks July 1 Below Year Ago Due to Lesser Production

Stocks of natural gasoline took a substantial drop during June according to the monthly report of the Bureau of Mines, the decline bringing the total below the total of a year ago by approximately 2,000,000 gallons. July 1 was the first date this year that stocks were below those of the same time a year ago and this was due to a very sharp drop in production.

The daily average production of natural gasoline in June of this year was 3,940,000 gallons and in May was 4,170,000 gallons. Compared to a year ago the June average is less by more than 1,000,000 gallons. This drop from 5,020,000 gallons daily a year ago to 3,940,000 gallons marks a loss in production of more than 1,000,000 gallons daily. This drop accounts for the major share of the decline in stocks over the month in which consumption of natural gasoline showed little change.

Except for a slight increase in the production in the Rocky Mountain area every section of the United States reported a decrease for June compared to May. The major share of the decrease is accounted for in the States of Oklahoma and California where approximately 4,000,000 gallons were dropped from the production of each state. Texas also showed a substantial loss, the decline amounting to approximately 2,000,000 gallons for the month.

In Oklahoma the Oklahoma City and Seminole City Fields each showed a large decrease and in California the Kettleman Hills and the Long Beach Fields accounted for the major share of the drop there. While these areas may be expected to show the largest drop due to the fact more gasoline is normally produced there, it is also true that gasoline can be made more cheaply here than in the older and more settled producing fields and the results of this curtailment of operations in flush fields is interpreted as a move among manufacturers to build up a stronger market.

Natural gasoline prices have not advanced in proportion to advances made in other branches of the oil industry. The refinery gasoline price, retail gasoline price and crude price have each shown a greater recovery from the lows of a year ago than has natural gasoline.

With this curtailing of output it will be an easy matter to bring stocks down to the level at which price advances seem inevitable. Already, stocks have been reduced below a year ago as stated previously and the significance of this is appreciated more when it is seen that this is the first time this year that stocks have been brought to the level of the same period a year ago. The trend of stocks over this period is shown in tabular form here:

STOCKS OF NATURAL GASOLINE REPORTED IN GALLONS AT CLOSE OF PERIOD

1931	
January	25,500,000
February	29,100,000
March	37,100,000
April	42,300,000
May	41,800,000
June	36,100,000
July	35,900,000
August	30,300,000
September	25,800,000
October	22,000,000
November	26,900,000
December	27,100,000
1932	
January	34,000,000
February	36,800,000
March	39,778,000
April	44,584,000
May	44,379,000
June	34,106,000

Over the balance of the year it is reasonable to expect an improvement in consumption on the part of refiners and also an increase in the use of low vapor pressure natural sold direct as a motor fuel. This latter business is taking increasing volumes of the regular grades off the market and this winter many manufacturers and marketers expect the volume to be several times that at present.

Following are the Bureau of Mines data covering the production and stocks of natural gasoline in the United States for the month of June and a comparison of these data with a year ago:

NATURAL GASOLINE STATISTICS, JUNE, 1932
(Thousands of gallons)

	Natural gasoline: Production June, 1932	Production May, 1932	Production June, 1931	Stocks end of month June, 1932	Stocks end of month May, 1932	Blended motor fuel, June, 1932: Naphtha or gasoline used	Naphtha or other oils used	Stocks end of month
Appalachian	3,700	4,800	4,200	5,066	6,807	36	62	131
Ill., Ky., Ind.	700	600	600	525	424	..	..	..
Oklahoma	29,900	33,400	38,800	12,251	16,993	23	40	24
Oklahoma City	5,900	7,100	5,600	2,526	3,196	..	..	..
Osage County	3,700	4,000	5,300	2,138	2,572	8	3	8
Seminole	4,900	10,100	16,500	5,088	6,021	2	..	1
Rest of State	11,400	12,200	11,400	3,499	5,204	16	37	15
Kansas	1,700	2,200	2,400	871	1,432	33	2	36
Texas	27,900	29,700	34,300	10,194	11,698	34	4	6
Panhandle	13,400	12,300	16,900	4,700	5,635	1	1	..
North Texas	2,000	2,400	2,500	792	928	..	..	3
West Central	6,300	7,200	8,900	3,632	4,326	5	3	3
Rest of State	6,200	5,900	6,000	1,074	809	28	..	..
Louisiana	3,800	4,000	4,700	930	1,198	2	1	..
Arkansas	1,700	1,800	2,300	205	335	..	..	5
Rocky Mountain	5,200	5,100	6,000	701	686	..	..	..
California	43,500	47,700	57,200	2,359	4,705	..	..	..
Huntington Beach	1,400	1,700	1,700	.....	.....	..	..	..
Kettleman Hills	10,300	11,300	15,700	.....	.....	..	..	..
Long Beach	8,700	9,500	11,100	.....	.....	..	..	..
Santa Fe Springs	5,100	5,700	9,900	.....	.....	..	..	..
Ventura Avenue	2,600	3,100	4,500	.....	.....	..	..	..
Rest of State	12,400	13,400	14,300	.....	.....	..	..	..
Total	118,100	129,300	150,300	34,106	44,379	131	109	202
Daily average	3,940	4,170	5,020	.....	.....	..	..	..
Total (thousands of barrels)	2,812	3,079	3,581	812	1,054	3	3	5
Daily average	94	99	119	.....	.....	..	..	..

To Attempt Taxing Residue Gas From Gasoline Plants

Natural gasoline plant operators in Oklahoma are anxious to learn what disposition will be made of the question now before the industry regarding the taxable value of residue gas. The Oklahoma Tax Commission has conducted several hearings in the past six months for the purpose of discussing the problem but thus far nothing definite has been forthcoming as to the specific points at issue. Another hearing is being held in Oklahoma City, Wednesday, but the full text of the problems to be discussed was not revealed in the following letter addressed to representatives of the natural gasoline industry.

Ray Miller, secretary of the association, and Clarel B. Mapes, representing producers through the Mid-Continent Oil and Gas Association will attend the meeting. Following is the body of the letter written by W. D. Murphy, acting chairman of the tax commission:

"Some weeks ago the Oklahoma Tax Commission conducted a hearing, attended by representatives of the various companies which were interested, upon the subject of arriving at the taxable value of casinghead gas, after taking into consideration the products derived therefrom.

"At the hearing, it was agreed between the commission and the representatives of the interested companies that the hearing would be continued to a future date for the purpose of having the representatives of such companies formulate and set out, in concrete form, their views of a solution of the problem; and, also, to enable the commission to further consider the same problem.

"Since such hearing, the commission had made further investigation, from the standpoint of the State; and it assumes that the representatives of the interested companies have done the same. It is, therefore, assumed that a further conference between the commission and the representatives of the interested companies is now advisable and in order.

"You are advised that, for this purpose, the Oklahoma Tax Commission has set August 17, 1932, at 10 o'clock a.m., for a further conference between the commission and representatives of the interested companies upon the subject above referred to.

APPROVE HIGHER PRESSURE

Unless opposition is made within 20 days to the ruling of August 13, by the Bureau of Explosives approving setting the safety valve on Class V propane cars and I.C.C. 105 cars at 225 pounds, the order stands approved. The original request was made by the Skelly Oil Co. and was made to permit certain heavily constructed cars to operate under the pressure named here. These cars are in the services of several companies manufacturing and transporting propane and other light fractions.

MAKE LOWER V.P. GASOLINE

OKLAHOMA CITY, Okla., Aug. 16.—Practically all natural gasoline plants here have adopted methods of operation designed to produce low vapor pressure products. Most of the production is stabilized well below the 26 pounds generally accepted as the popular grade. Much of it is now sold as 15-pound material. In some instances topping equipment has been added which permit the topping of small volumes of crude. This is mixed with the low vapor pressure natural to make a motor fuel direct.

Belt Difficulties Nothing to Worry About If the Operator Gives Them a Little More Study

By ROBERT W. DRAKE
Electrical and Mechanical Engineer

Ordinarily a motor belt drive that has been planned intelligently gives long and quite satisfactory service. The older men who have a background of many years of working with both motors and belts all know this.

The average motor drive belt runs for a long time without any attention except to keep the leather from drying out and one belt shortening or so when the belt is new.

The operation of machinery by motors brings up a number of special conditions such as increasing the load, the speed or the output of the driven machine, and when this happens you must make some changes in your belt drive to adapt the belt to the new condition. These changes are relatively simple if you know what to do. However, if you have to make the changes and do not know what to do you may either find yourself in trouble, or think you are in trouble, which amounts to the same thing.

It may be that a very small pulley drives to a large one on short center with a violently fluctuating load exhibiting extreme peaks. It may be that, through no fault of the user, he has a motor operating with a motor pulley considerably smaller in diameter than the minimum diameter pulley specified by the manufacturer of the motor, which may develop bearing trouble. The belt speed may have to be increased, the motor may run too hot, the belt life may seem too short—all of these are special conditions to which the belt drive must be adapted.

It is the aim of this article to help the operator to recognize such special conditions, tell what to do and how to do it so that the belt drive will be free from trouble should difficulties, of any description, arise. Trouble loses its terrors when we know the cure.

Proportioning the Belt to the Drive

A belt which will carry 10 horsepower is not necessarily suited to a 10-horsepower motor. The momentary overloads during starting and running determine the belt drive needed. Too often a belt drive is proportioned from consideration of average running conditions. We too often lose sight of the fact that the belt must carry the peak loads as well as the running load. This accounts for a large proportion of all the trouble encountered.

Fully one-half of the belted motor applications in industry require a heavier belt for starting than is required for satisfactory running. Practically all three-phase A.C. motors which start on the line, and many D.C. motors, develop from one-third to one-half more belt pull at starting than when operating at full rated load. Wound rotor motors sometimes, and high slip line start motors (high resistance rotor motors) always develop twice normal full load belt pull at starting.

When A.C. line start motors reach about three-quarters full speed, or when compensator start motors are thrown over onto the line before they rise much above three-quarters full speed, the belt pull rises to double full load for a time, a short time with an easy starting load, which comes up to speed quickly, a longer time for a slow starting load.

The motor determines the belt pull during starting without reference to the requirements of the load. Any pull available in excess of that necessary to overcome starting resistance is used in hustling the load up to speed more quickly. It is a fact that a belt which will carry an excessive pull momentarily on an easy starting load, will frequently come off, if the same pull persists for several seconds, on a load which takes longer to start.

It is evident that the belt drive from a motor must in general be capable of carrying about twice the normal full load belt pull, at least for a short time during starting. In the case of many 60-cycle motors running at 1,800 r.p.m. and all high slip (high resistance rotor) motors, instead of twice full load pull, the belt must transmit 2½ times full load pull.

To Have a Drive Carry More Power

If the capacity of a drive planned with motor manufacturer's standard pulleys must be increased because of extreme load peaks or for any other reason, what can we do to the drive? There are a number of expedients which will help in such cases. They are:

1. Putting on paper pulleys, if old ones are wood or metal.
2. Securing higher belt speed by means of larger diameter pulleys.
3. Using the pivoted motor base.
4. Using gravity idler drives.
5. Putting on a wider belt (provided the bearings will stand the extra belt pull necessary if a wider belt is to carry additional load).

Two or three of these are all that are possible in any one case. Occasionally, when conditions are particularly unfavorable, two or three of these expedients must be employed in order to make a satisfactory drive.

Where the smaller pulley of the drive is not paper, an increase of 25 per cent in drive capacity may be obtained by installing a paper pulley. Since all motor manufacturers furnish paper pulleys, they are generally used on the motor, but we sometimes lose sight of the fact that in speed up drives the driven pulley is the smaller and should also be paper. Even on drives where the driven pulley is the larger, a worthwhile improvement in capacity and a decrease in slip may be obtained by substituting a split paper driven pulley where the driven pulley is not more than three times as large as the driver.

Higher Belt Speed

The faster a belt is run up to 5,000-6,000 per minute, the more horsepower it will carry. Above 4,500 feet per minute the gain in horsepower is not large.

Except for medium and large 1,750 r.p.m. motors and large 1,140 r.p.m. motors, manufacturers' standard pulleys give belt speeds decidedly below 4,500 feet per minute. In many cases it is possible to materially increase the horsepower capacity of an existing drive by increasing the belt speed without exceeding 4,500 feet per minute. The cost of two pulleys and a slight increase in belt length is moderate. Substantial increases in drive capacity are thus easily obtained without any increase in belt width, belt tension, or motor bearing loads.

On the smaller sizes of motors, you can increase the belt speed more than is ever required, several hundred per cent in many cases. On medium sizes of motors operating at less than 1,800 r.p.m. you can increase the belt speed enough for ordinary "trouble" jobs.

Higher belt speeds may often be used where the drive carries the load satisfactorily, but the motor bearings heat dangerously. By substantially increasing the belt speed a narrower belt may be used, or the old belt run slack and the bearings greatly relieved.

Wherever the motor pulleys in service are smaller than the sizes tabulated below, higher belt speed should be considered first of all when relief is desired for an overloaded drive. For motors operating at 1,750 r.p.m. a 9¾-inch pulley corresponds to 4,500 feet per minute. Similary for other motor speeds: 1,140 r.p.m. motor, 15-inch pulley, corresponds to 4,500 feet per minue; 850 r.p.m. motor, 20-inch pulley, corresponds to 4,500 feet per minute; 690 r.p.m. motor, 25-inch pulley, corresponds to 4,500 feet per minute; 570 r.p.m. motor, 30-inch pulley, corresponds to 4,500 feet per minute.

In some cases you cannot increase the belt speed. For instance on a large 1,800 r.p.m. motor where the belt runs at 4,500 feet per minute or more already. We may find it is impossible to increase the driven pulley size because of interference with ceiling, floor or with the frame of the driven machine.

Allowance for Overtightening

There is ordinarily some allowance in the design of motor bearings for overtightening belts or for some slight increase in belt width. Such allowance is small in large high-speed motors and is larger in moderate or slow-speed motors and small motors.

All motor manufacturers will furnish tables or data sheets showing the widest belt and the corresponding smallest pulley which any given frame, operated at any given speed, will stand without dangerously overloading bearings. It is worth while for the plant engineer to provide himself with these data covering the lines of modern and obsolete motors which he is using.

A belt does all its work on the tight side, but there must always be a considerable pull on the slack side also to make the belt grip the pulley and prevent slippage. With an ordinary belt drive, as the load comes on, the tight side stretches and passes extra length around into the slack side. Finally as the load increases the slack side becomes so loose that the belt slips excessively. This is the extreme overload limit for the drive. To keep the capacity for occasional overload high, it is necessary to operate both slack side and tight side much tighter at normal loads than is necessary to carry normal loads.

Under heavy tensions belts stretch. It is usual to tighten the belt up more than necessary so that retightening for stretch will not be needed for some time. Both the pivoted motor base and the gravity idler drive greatly reduce in most cases the pulls on both the tight and the slack side of the belt at all loads except extreme overloads.

Even at extreme overloads they afford considerable relief for they make it unnecessary to strain up the drive tighter than is needed for operating requirements in order to allow for subsequent stretch. The motion of the pivoted base or the gravity idler take up the stretch.

Now, ordinarily belt drives on motors operate at an average motor load not much exceeding the motor rating, but the belt tensions must be sufficient to enable the belt to carry about double the corresponding pulls momentarily during starting, and for short periods during operation.

Three Times Normal Pull

In extreme cases with certain types of high-speed motors, the belt must carry three times normal pull momentarily, a small part of this being power delivered by the motor rotor as a flywheel in addition to the power delivered from the electrical operation of the motor.

A gravity idler or pivoted motor base properly adjusted may carry heavier intermittent loads than an ordinary drive without overheating motor bearings, for the load on the motor bearings will be decreased during periods of light load and normal load.

During swings of abnormal load the bearing pressures will approach those of an ordinary open drive but such periods do not last long enough to overheat the bearings. If they did the motor would burn up. Similarly belts last longer if they are strained to carry extreme loads only during occasional swings of overload, and do not run so tight the remainder of the time.

On such a drive, properly adjusted, it is safe to use a belt slightly wider than could be used on the same motor with an ordinary drive. This is a "life-saver" when pulleys smaller than standard are necessary on fairly high-speed motors. Note the words "properly adjusted" in the above sentence. Some manufacturers of gravity idler drives send out a liberal supply of weights with the drive and leave it to the customer to determine the number of weights to be used and their position. This would be fatal in a case where the motor bearings ran very hot, unless the customer promptly determined, on starting the job, the minimum weight required to carry the heaviest load fluctuation, and used no more.

Not to Change Road Oil and Asphalt Specifications

(Continued from Page 27)

phalt meeting the following requirements:

1. It shall be free from water or decomposition products.
2. It shall not flash below 80° F. when tested by the Cleveland open cup tester.
3. The specific viscosity (Engler) at 77° F. (25° C.) 50 cc. shall be not less than 50 nor more than 70.
4. When distilled by A.S.T.M. Method D-20-28T with base of bulb of thermometer not over one-half inch from bottom of flask, the distillate off by volume shall be as follows:
   Off at 437° F. not less than 15%
   Off at 600° F. not less than 30%
   Off at 680° F. not less than 42%
5. The residue when poured from the flask without cooling immediately upon reaching the maximum temperature specified shall have the following characteristics.
6. The penetration at 77° F.—100 grs.—5 sec. shall be not less than 80 nor more than 110.
7. It shall be soluble in chemically pure carbon bisulphide to the extent of at least 99.0 per cent.
8. The ductility at 77° F.—5 cm. per min. shall be not less than 100 cm.

Special Cut-Back Asphalt Surfacing Material—Medium

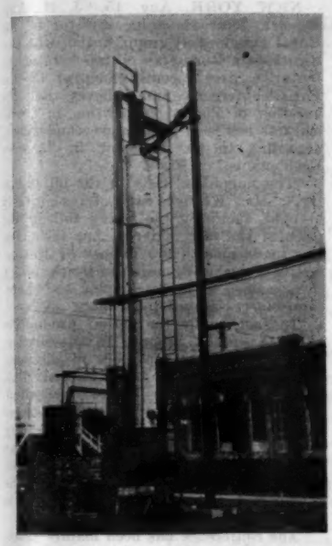
This material shall be a cut-back asphaltic oil meeting the following requirements:

1. It shall be free from water or decomposition products.
2. It shall not flash below 90° F. when tested by the Cleveland open cup tester.
3. The specific viscosity (Engler) at 122° F. (50° C.) shall be not less than 40 nor more than 100 per cent.
4. When distilled by A.S.T.M. Method D-20-28T with base of bulb of thermometer not over one-half inch from bottom of flask, the distillate off by volume shall be as follows:
   Off at 437° F. not less than 10%
   Off at 600° F. not less than 30%
   Off at 680° F. not more than 35%
5. The residue when poured from the flask without cooling immediately upon reaching the maximum temperature specified shall have the following characteristics.
6. The penetration at 77° F.—100 grs.—5 sec. shall be not less than 70 nor more than 100.
7. It shall be soluble in chemically pure carbon bisulphide to the extent of at least 99.0 per cent.
8. The ductility at 77° F.—5 cm. per min. shall be not less than 100 cm

Miniature Operation Gives Check on Refinery Data

(Continued from Page 13)

To offset the surface to volume ratio radiation losses which are great in the usual laboratory distillation unit, and to give as nearly as possible the results of the theoretically efficient fractionating tower, an arrangement is provided utilizing the flue gases to overcome the practical impossibility of completely insulating the miniature column. This arrangement is readily apparent in the accompanying diagrams.



Miniature distillation unit at Toledo, O., refinery of the Pure Oil Co.

Fifty-Gallon Capacity

The laboratory distillation unit has a charging capacity of 50 gallons and produces from 1 to 2 gallons of naphtha per hour. Operation is either batch or semi-continuous, depending upon the character of the cuts being made. Distillation data taken from this fractionating unit follow: The still was charged with 40 gallons of Michigan naphtha of which 28.75 gallons were heavy naphtha of 51.1 gravity, 227° initial and 618° endpoint, and 11.25 gallons were light naphtha of 72.1 gravity, 103° initial and 372° endpoint. The percentages were 28.12 per cent light naphtha, and 71.88 per cent heavy naphtha.

Cost of materials and labor in the installation of the laboratory fractionating unit at the Toledo plant was less than $500.

Increasing Imports of Crude Oil Reflect Expansion

(Continued from Page 28)

the refinery was reported to have been destroyed by German troops and the movable equipment transported to Germany. Reconstruction of the refinery was begun after the Armistice, but several years elapsed before it was again in operation.

Construction of the refinery at Petit Couronne was begun in 1927 and the plant was placed in operation early in 1929. It is located about 10 miles from Rouen. The original capacity of the plant was approximately 1,400,000 bbls. annually, but the capacity is being increased to about 4,000,000 bbls. yearly.

Three New Plants

Three new refineries, construction of which resulted from the decree of April 1, 1931, are reported to have been completed. One of these is the Raffinerie de Petrole du Nord, at Dunkerque, with a rated capacity of about 2,000,000 bbls. yearly, but which may later be increased to 3,500,000 bbls. yearly. The plant is designed to operate on Russian crudes.

The Raffinerie de Berre, near Marseilles, of the Compagnie des Produits Chimiques et Raffinerie de Berre, was completed in 1931 and is reported in operation. It was to this refinery that the Union Oil Co. of California shipped two tanker loads of Kettleman Hills crude during June.

The third of the recently completed plants is that of the Societe des Raffineries de Petrole de Gironde, at Bec d'Ambes, near Bordeaux. The Texas Company was reported recently to have purchased an interest in this plant. It is equipped with Cross and Dubbs cracking units and has a capacity of between 2,000,000 and 2,500,000 bbls. annually. It is reported to be operating on East Texas crude.

Plants Under Construction

Other refining plants are reported under construction, most of which contemplate being ready for operation during 1933. The Standard Franco-Americaine de Raffinage (Standard Oil of New Jersey) is building a refinery at Port Jerome, between Rouen and Havre. The plant will be equipped with two pipe stills, three tube and tank units, a vapor recovery system and the necessary equipment for the manufacture of lubricants. Its annual capacity will approximate 7,000,000 bbls. Crude oil will be shipped by tanker to Havre and thence transported through two pipe lines a distance of 20 miles to the refinery. It is possible that this plant will ultimately operate on crude oil from Iraq.

The Compagnie Francaise de Raffinage is building a plant at Gonfreville, near Havre, between the Tancarville canal and the Seine. It will be equipped for cracking and its completion is scheduled for 1933. Crude oil will be received through a 6-mile pipe line from Havre. The annual capacity will approximate 3,000,000 bbls. The plant is being designed to operate on crude oil from Iraq but, in the interim between its completion and the laying of the Iraq pipe line, it will be operated on Russian and Mid-Continent crudes similar to that of the Mesopotamian Field.

The Vacuum Oil Co. is reported to have two plants under construction, one at Port Jerome and the other at Frontignan. The combined capacity will be about 3,000,000 bbls. annually.

The Societe Jupiter, operating a refinery at Petit Couronne, also has a plant under construction at Pauillac, which will have an annual capacity of about 2,000,000 bbls.

Construction Authorized

In addition to the plants which were operating at the time of the decree of April 1, 1931, those which have been completed subsequently, and those which are under construction, several others have been authorized and their construction is being considered. The Societe Generale des Huiles de Petrole, operating the refinery at Courchelettes, plans the construction of a refinery at Lavera. This will have an annual capacity of about 2,250,000 bbls. and will operate on Persian crudes. A terminal has been operated at Lavera by the company for a number of years.

The Compagnie Francaise de Raffinage, building its Normandie refinery, contemplates the erection of a refinery at Martiques, on the Etang de Berre. La Consommateurs de Petrole has been authorized to build a refinery at Donges, about 6 miles from Saint Nazaire on the Loire. Its operations will be limited to the production of lubricating and gas oils.

TANK WAGON CHANGES

(Continued from Page 26)

of 21.5 cents per gallon at Augusta, Ga. Same company effective July 27 established gasoline tank wagon and service station prices of 20 cents at Montgomery, Ala.

Continental Oil Co. effective August 6 reduced gasoline tank wagon and service station prices 1 cent at Salt Lake City, Utah.

Standard Oil Co. of New Jersey, effective June 21, reduced gasoline service station price 1 cent to 21.9 cents including 7-cent taxes at Columbia, S. C. Same company established discounts to dealers of 2 cents off retail tank wagon prices except at Washington, D. C., and Baltimore, Md., where discount is 3 cents. The discount became effective in Maryland on August 8 and in New Jersey on August 10.

CRUDE OIL PRICE CHANGES

The Joseph Seep Purchasing Agency (South Penn Oil Co.) reduced the price of Pennsylvania grade oil in Buckeye Pipe Line Co., Southwest Penn Pipe Line and Eureka Pipe Line Co. lines 3 cents per barrel, effective August 11. The oil affected is produced in southwestern Pennsylvania, southeastern Ohio and in West Virginia. The cut in price did not affect the crude oil produced in the Allegany and Bradford Fields, nor the fields served by the National Transit Co.'s lines in western Pennsylvania. No official announcement of the reason for the price reduction was given but it is assumed in the territory affected that the action was taken to meet the pipe line tax imposed by the Government.

California Crude Oil Prices

STANDARD OIL CO. OF CALIFORNIA
(Effective June 26, 1932)

For current purchases of crude oil at the well (unless otherwise specified). (All gravities above those quoted take highest price offered in that field.)

Gravity—	Signal Hill (Long Beach)	Seal Beach, Alamitos Heights, Huntington Beach	Inglewood	Playa Del Rey	Olinda-Brea Canyon	Torrance	Richfield	Coyote Hills	Santa Fe Springs	Midway-Sunset, Elk Hills, Buena Vista Hills	Lost Hills	Athens, Rosecrans, Dominguez	Montebello	Wheeler Ridge	Coalinga	Whittier-LaHabra
14-14.9	$ .65	$ .65	$ .65	$ .65	$ .65	$ .65	$ .65	$ 65	....	$ 55	$ 55	....	$ .65	$ .55	$ .55	$ .65
15-15.9	.65	.65	.65	.65	.65	.65	.65	65	....	55	55	....	.65	.55	.55	.65
16-16.9	.65	.65	.65	.65	.65	.65	.65	65	....	.55	.55	....	.65	.55	.55	.65
17-17.9	.65	.65	.65	.65	.65	.65	.65	65	....	.55	.55	....	.65	.55	.55	.65
18-18.9	.65	.65	.65	.65	.65	.65	.65	65	....	.55	.55	....	.65	.55	.55	.65
19-19.9	.65	.65	.65	.65	.65	.65	.65	65	....	.55	.55	....	.65	.55	.55	.65
20-20.9	.69	.69	.71	.69	.69	.69	.69	65	....	59	.59	....	.65	.57	.59	.68
21-21.9	.74	.74	.77	.74	.74	.74	.74	66	....	63	63	....	.67	.60	.62	.73
22-22.9	.79	.79	.82	.78	.79	.79	.79	.70	....	.69	.69	....	.70	.63	.65	.77
23-23.9	.84	.84	.88	.82	.84	.84	.84	.76	....	.75	.75	....	.73	.66	.68	.83
24-24.9	.89	.89	.92	.86	.89	.89	.89	.81	.73	.81	.81	.89	.76	.69	.72	.89
25-25.9	.93	.93	....	.91	.93	.93	.93	.86	.79	.87	.87	.93	.80	.72	.75	....
26-26.9	.97	.97	....	.96	.97	....	....	.90	.84	.92	.91	.97	....	....	....	....
27-27.9	1.00	....	....	....	1.00	....	....	.94	.89	.97	.94	1.00	....	....	....	....
28-28.9	1.03	....	....	....	1.03	....	....	.98	.94	1.02	.99	1.03	....	....	....	....
29-29.9	1.06	....	....	....	....	....	....	1 02	.98	1.07	1.02	1.06	....	....	....	....
30-30.9	1.09	....	....	....	....	....	....	1 05	1.02	1 12	1.05	1.09	....	....	....	....
31-31.9	....	....	....	....	....	....	....	....	1.06	....	....	1.12	....	....	....	....
32-32.9	....	....	....	....	....	....	....	....	1.10	....	....	1.15	....	....	....	....
33-32.9	....	....	....	....	....	....	....	....	1.14	....	....	....	....	....	....	....
34-34.9	....	....	....	....	....	....	....	....	1.18	....	....	....	....	....	....	....
35-35.9	....	....	....	....	....	....	....	....	1 22	....	....	....	....	....	....	....
36-36.9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

The Texas Company, effective June 26, posted same prices as the Standard Oil Co. in Signal Hill, Alamitos Heights, Huntington Beach, Torrance, Richfield, Montebello, North Whittier and Santa Fe Springs.

The Union Oil Co., effective June 26, posted the same prices as the Standard Oil Co. in the Signal Hill, Alamitos Heights, Seal Beach, Huntington Beach, Athens, Rosecrans, Dominguez, Torrance, Santa Fe Springs, Playa Del Rey, Coyote, Olinda, Brea Canyon, Richfield and Montebello. In Coalinga, Lost Hills, Kern River, McKittrick, Midway-Sunset, Elk Hills and Buena Vista Hills the Union Oil Co. met the Standard Oil Co.'s prices from 14 gravity upward, but posted a price of 50 cents for oil 11 to 13.9 degrees in gravity.

General Petroleum Co. adopted Standard Oil Co.'s prices, effective June 26, in Rosecrans, Signal Hill, Alamitos Heights, Santa Fe Springs, Inglewood, Torrance, Brea Canyon, and Olinda, up to 35.9 degrees; Richfield, Ventura Avenue, Midway-Sunset, Fruitvale, Kern River, Poso, Round Mountain, and Coalinga and posted in Rincon as follows: 22-22.9 degrees, 68 cents; 23-23.9 degrees, 73 cents; 24-24.9 degrees, 78 cents; 25-25.9 degrees, 83 cents; 26-26.9 degrees, 88 cents; 27-27.9 degrees, 89 cents; 28-28.9 degrees, 92 cents; 29-29.9 degrees, 95 cents; 30 degrees and over, 98 cents. In Rosecrans General Petroleum Co. pays 65 cents for 14 to 19.9 gravity oil; 20-20.9 degrees, 69 cents; 21-21.9 degrees, 74 cents; 22-22.9 degrees, 79 cents; 23-23.9 degrees, 84 cents and Standard's prices for oil of higher gravity.

Associated Oil Co., effective June 26, met Standard Oil Co.'s prices in Signal Hill, Huntington Beach, Seal Beach, Alamitos Heights, Richfield, Torrance, Inglewood, Athens, Rosecrans, Dominguez, Santa Fe Springs, McKittrick, Kern River, Midway Sunset, Elk Hills, Buena Vista Hills, Lost Hills, Belridge and Coalinga.

Kettleman Hills—The Union Oil Co., effective June 26, posted 33-33.9 gravity oil at 91 cents; 34-34.9 degrees, 93 cents; 35-35.9 degrees, 95 cents; 36-36.9 degrees, 97 cents; 37-37.9 degrees, 99 cents;38-38.9 degrees, $1.01; 39 degrees and over, $1.03, Standard Oil Co., Associated Oil Co. and General Petroleum Co. adopted same price schedule on same day.

Santa Paula—The Union Oil Co. and The Texas Company, effective June 26, posted as follows: 14 degrees to 19.19.9 degrees, 65 cents; 20-20.9 degrees, 69 cents; 21-21.9 degrees, 72 cents; 22-22.9 degrees, 75 cents; 23-23.9 degrees, 78 cents; 24-24.9 degrees, 81 cents; 25-25.9 degrees, 84 cents; 26-26.9 degrees, 87 cents; 27-27.9 degrees, 90 cents; 28-28.9 degrees, 93 cents; 29 degrees and above, 99 cents.

Shiells Canyon and South Mountain—The Texas Company, effective June 26, posted same prices as in Santa Paula.

Orcutt—The Union Oil Co., effective June 26, posted prices as follows: 16 degrees to 19.9 degrees, 55 cents; 20-20.9 degrees, 59 cents; 21-21.9 degrees, 63 cents; 22.22.9 degrees, 69 cents; 23-23.9 degrees, 75 cents; 24-24.9 degrees, 81 cents; 25-25.9 degrees, 87 cents; 26 degrees and above, 92 cents.

Playa Del Rey—Subject to a field gathering charge of 5 cents per barrel.

Newhall, McKittrick and Kern River—Standard Oil Co., effective June 23, 1931, posted 55 cents for oil of all grades.

Elwood Terrace—Standard Oil Co., effective June 26, 1932, posts 33-33.9 degrees, $1.04; 34-34.9 degrees, $1.10; 35-35.9 degrees, $1.16; 36-36.9 degrees, $1.22; 37-37.9 degrees, $1.28. All prices f.o.b. ships.

Ventura Avenue—General Petroleum Co. and Associated Oil Co. effective June 26 posted as follows: 22-22.9 degrees, 72 cents; 23-23.9 degrees, 77 cents; 24-24.9 degrees, 82 cents; 25-25.9 degrees, 86 cents; 26-26.9 degrees, 90 cents; 27-27.9 degrees, 93 cents; 28-28.9 degrees, 96 cents; 29-29.9 degrees, 99 cents; 30 degrees and over, $1.02.

Potrero—Associated Oil Co., effective June 26, posted same prices as are paid by all companies in Athens, Rosecrans and Dominguez.

Operators Consider Plan for Unitizing Hobbs Pool

By L. E. BREDBERG

FORT WORTH, Tex., Aug. 16.—Every company and operator of the Hobbs Pool, New Mexico, had representatives attending the meeting held here yesterday and continued over today to try to reach an agreement on a unitized plan drafted and proposed by the division manager of The Texas Company at Fort Worth.

Three chief factors being considered in the proposal to establish unit operation are potential, acreage and position on structure. Two operators opposed the first set up contending for higher percentages in the unit plan. Doctor Wells, New Mexico state geologist, attended the meeting and said any plan would be acceptable if it did not stop development and would not drastically reduce production but would conserve the petroleum and natural gas reserve.

It is thought that if the pool is not unitized the plan of prorating it will be changed and operators are talking of basing allowable production on four factors, potential, acreage, structure position, and bottom hole pressure.

ARGENTINA PLANS DRILLING

Under the terms of a bill now under consideration by the Argentina government, a sum of 25,000,000 pesos ($10,610,000 in U. S. currency) will be appropriated for field exploration work, new drilling, and refinery construction. The program of expansion of the government's operations in oil is designed to bring to an end the present depression in the petroleum industry of that country.

ROCKY MOUNTAIN RUNS

Average daily pipe line runs from fields in the Rocky Mountain territory for the week ending August 13 follow:

	Bbls.
WYOMING	
Salt Creek	16,020
Big Muddy	1,670
Badger Basin	50
Byron-Garland	1,100
Dallas Derby	440
Dutton Creek	80
Elk Basin	470
Ferris	50
Frannie	150
Grass Creek	4,210
Greybull	0
Hamilton Dome	870
Hudson	410
LaBarge	740
Lance Creek	110
Lost Soldier	2,830
Mule Creek	0
Midway	110
Notches	0
Oregon Basin	90
Osage	760
Pilot Butte	30
Rex Lake	0
Rock River	1,170
South Casper	0
Poison Spider	80
Teapot	20
Warm Springs	20
Total Wyoming	31,470
MONTANA	
Buckley-Border	540
Cat Creek	360
Dry Creek	630
Kevin-Sunburst	4,140
Lake Basin	40
Pondera	1,210
Total Montana	7,490
COLORADO	
Florence	230
Fort Collins and Wellington	700
Iles Dome	550
Moffat	630
Orchard	230
Rangely	90
Tow Creek	250
Total Colorado	2,670
NEW MEXICO	
Artesia	532
Caprock	814
Hogback	460
Jal	946
Rattlesnake	700
Table Mesa	80
Eunice	512
Hobbs	25,023
Lea	2,187
Texas-Pacific	52
Total New Mexico	31,396
Total Rocky Mountain area	72,936
Total previous week	83,401
Difference	10,465

State-Wide Committee Acts on Oklahoma City Rumors

The Oklahoma statewide proration committee at a meeting August 12, gave its unqualified approval to the resolution adopted by the proration legal committee on August 8, regarding rumors of illegal production in the Oklahoma City Field, and recommended and strongly advised that every means be taken to uncover all of the facts with regard to violation of the proration orders promulgated by the Corporation Commission of Oklahoma, and that if any facts or information are produced which show tangible evidence of violations of the orders, the violators should be prosecuted immediately.

It was further recommended that the law firm of Hayes, Richardson, Shartel, Gilliland & Jordan, of Oklahoma City, be immediately retained to handle all matters concerning oil proration in Oklahoma and that they be instructed to proceed at once with a full investigation of all rumors, charges and counter charges that have been made with regard to violation of the proration orders throughout the State and ascertain all of the facts which may be available.

Allowable of 20,000 Bbls. Is Urged for Rabbs Ridge

By NEIL WILLIAMS

HOUSTON, Tex., Aug. 16.—Recommendations that a maximum allowable of 20,000 bbls. daily be permitted for the Rabbs Ridge Field, Fort Bend County, Gulf Coast, were made at a Railroad Commission proration hearing here today. Operators in the field offered testimony to show that although the field is in an embryonic stage of development, the producing of that much oil would not injure the reservoir conditions. Under the proposal, the daily allowable would be distributed on a basis of 20-acre units, each unit on production to be allowed its pro rata share of the total allowable, with the apportionment to be revised each 15 days as new units are brought under production.

The operators pointed out that the field, which already has been proved over 2,500 acres, is being developed with a view toward repressuring. It was shown that the field is being produced as efficiently as possible in view of what information is available as to the reservoir and that 75 per cent of the wells have a gas oil ratio of less than 500 feet. The field at present is flowing around 15,000 bbls. and so far has had no proration.

ANGLO-PERSIAN IN GERMANY

Anglo-Persian Oil Co., Ltd., will participate with British-Borneo Petroleum Syndicate, Ltd., in developing a tract of approximately 54 square miles in the State of Brunswick, Germany. Geological work has already been done on some of the acreage, and test drilling will be commenced shortly, under the technical direction of Anglo-Persian's engineering department.

CALIFORNIA INTO PERSIA

Initial drilling operations by a Standard Oil Co. of California drilling crew on the company's concessions at Bahrein Island, on the Abadan side of the Persian Gulf, have proven successful, according to London reports, with 600 bbls. daily now being produced. The Bahrein operations are being carried out by Bahrein Petroleum Co., Ltd., a Canadian-registered subsidiary of Standard of California.

IMPORTANT WILDCAT

FORT WORTH, Tex., Aug. 16.—Penn Oil Co. and Shell Petroleum Corp. are moving in derrick for a 7,000-foot test on a large block geologized and core drilled by crews of both companies. The location is in the center of William Phillips 160-acre tract in the Swayze Survey between Centerville and Buffalo in Leon County. This will be an exceptionally interesting wildcat test.

Late Fields

OKLAHOMA

Gypsy Oil Co. and others' No. 1 Masters, in Section 25-6-4, Pottawatomie County, community test, drilled the cement plugs at a total depth of 3,133 feet. There was 800 feet of water in the hole when the cement plugs were drilled and the crew has been unable to lower the water level, indicating that water was coming into the hole at the bottom.

Bee Oil & Gas Co.'s No. 1 in Section 20-9-6, in Seminole County, which was completed about three weeks ago and has been shut in for proration, was opened during the week and is estimated to have made 600 bbls. No gauges were obtainable. The oil production is from the Calvin sand at 2,751-88 feet.

Gypsy Oil Co.'s No. 1 Rentie, in Section 17-9-6, Seminole County, found the Calvin sand at 2,703 feet and from 2,720-23 feet 1,000 feet of fluid rose in the hole. It was drilling deeper at 2,749 feet.

McCampbell and others' No. 1 in the NE cor. SW, Section 20-9-6, is a location.

J. Pringle and others' No. 1, in the SE cor. NE SE Section 8-7-8, is a location in the Holdenville area of Hughes County.

Magnolia Petroleum Co.'s No. 1 School Land, in Section 36-6-4, Pottawatomie County, found the Calvin sand at 2,931-49 feet, with a showing of oil and gas. The 8-inch casing was landed on top of the sand and it was rigging up standard tools.

Slick-Urschel, Inc.'s No. 18 Classen-Edwards, NW cor. SE SW Section 3-11-3w, in the north end of the Oklahoma City Field, made 1,244 bbls. of oil the first 45 minutes and the next day made 3,176 bbls. of oil in two hours from the Wilcox sand at 6,357-6,499 feet.

Phillips Petroleum Co.'s No. 1 Bump, SE cor. SW NE Section 3-11-3w, Oklahoma City Field, flowed 1,300 bbls. in one and one-half hours from the Wilcox sand at 6,290-6,466 feet.

Payne Drilling Co. and others' No. 1 in Section 29-10-6, Seminole County, found the Cromwell sand at 3,811-18 feet, with a showing of oil. Casing was being landed to make a production test.

KANSAS

Skelly Oil Co.'s No. 1 Leisman, C SE SW Section 30-27-10w, Kingman County, was drilling 56 feet in the Siliceous lime at a total depth of 4,149 feet. It was estimated to be making 8,000,000 feet of gas at this depth. The hole is loaded while the drilling continues and it will be a few days before an accurate gauge can be made of the production.

The ninety-third Viola lime well in the Ritz-Canton Pool, in McPherson County, is estimated at 500 bbls. daily. The well is Darby Petroleum Corp.'s No. 1 Kaegi, NE cor. Section 20-19-1w, in the northeast part of that field. It was originally completed as a chat gas well and was drilled deeper to the Viola lime. The pay horizon was found at 3,374-3,400 feet.

General Petroleum Corp.'s No. 1 Middleswart, NE cor. Section 1-19-2w, a semiwildcat a half mile north of gas production in the Decker Field in McPherson County, was drilling at 1,500 feet. Three offsets will be forced if this test makes a commercial well. It will also extend the gas production a half mile to the northwest.

In the Johnson Pool, in McPherson County, J. M. Brennon and others' No. 1 Bridgens, SE cor. SW SW, Section 2-20-3w, was expecting to reach the chat in a day or two. The last reported depth was 2,800 feet.

W. E. Stringer and others' No. 1 Schwindler, in Section 2-25-11w, Stafford County wildcat, was rigging up preparing to spud.

Grossman & Boyle's No. 1 C. Smith, NE cor. NW NW, Section 29-19-1w, in the Ritz-Canton Pool, in McPherson County, was dry in the chat and drilling was being continued to the Viola lime. The base of the chat was found at 3,070 feet.

Mylius and others' No. 1 Ediger, SE cor. SW, Section 16-21-3w, in the south extension of the Voshell Pool, McPherson County, reached the top of the chat 55 feet higher than the nearby wells.

Slick, Pryor & Lockhart's No. 1 Breford, SW cor. NW, Section 7-17-10w, Ellsworth County wildcat, found the Siliceous lime at 3,370-76 feet with nothing showing. Casing was being landed on top of the Siliceous lime before drilling deeper.

Kessler Interviewed on Conference Outcome

NEW YORK, Aug. 15.—J. B. Aug. Kessler, joint managing director of the Royal Dutch-Shell group, anticipates ratification by Rumanian oil interests of the tentative pact recently adopted at the Paris conference, and believes that the question of Soviet competition in world markets has been greatly overemphasized, according to an interview in "Agence Economique" of Paris.

"The universal crisis in the oil industry," Mr. Kessler said, "was largely brought about by the heavy fall in the price of the raw material, but the crisis was made much more intense by the defective distributing organization in which there was so much overlapping and therefore unnecessary competition.

"In fact, while the actual production of oil has been brought to the highest point of efficiency, methods of distribution still leave much to be desired. This distribution problem is, to my mind, quite as important as that of overproduction or of price. I may truthfully say that the oil industry as a whole is far and away the best organized of all the great raw material industries, but the distribution of the refined products is not equal to perfection of production.

"The conference has been mainly taken up with this problem, and we have sought carefully to define the different spheres of costs so far as the sales department is concerned.

"As for the representatives of the Soviet, they had seen nothing of them at the (Paris) conference, but they had negotiated with them at New York, where the conference judged their proposals to be totally unacceptable.

"If the Soviet likes to make further overtures, they were quite prepared to examine them in a conciliatory spirit. The Soviet capacity of production as well as its export possibilities has been very much exaggerated. Oil interests as a whole have little to fear from Russian competition."

CANADIAN PETROLEUM IMPORTS

CHATHAM, Ontario, Aug. 13.—According to official figures, Canadian petroleum imports for June amounted to 113,948,000 gallons compared with 117,341,000 gallons in June. The June imports included 82,295,000 gallons from the United States; Peru, 15,875,000 gallons; Colombia, 8,152,000 gallons; and Venezuela, 7,624,000 gallons. There were no imports from Trinidad.

ATLANTIC TO DRILL IN CUBA

NEW YORK, Aug. 15.—Atlantic Refining Co. has transferred some of its drilling equipment from Venezuela, where it is no longer required, ot Port Matanzas, Cuba, to be used in test drilling on the island. Geologists of Atlantic Refining Co. have been carrying on field work in Cuba for the past two years, and have selected several sites for test drilling operations.

MAGNETIC STORM

Tuscon, Ariz., observatory of the U. S. Coast and Geodetic Survey reports a moderate magnetic storm starting at 4 p.m. (C.S.T.), August 11 and ending at 6 a.m. (C.S.T.) August 13. The telegrams read:

"Storm began eleventh. Twenty-two. Moderate."

"Storm ended thirteenth. Twelve."

C. D. BRIGHTWELL DEAD

Dispatches from Cucuta, Colombia, report that Charles D. Brightwell, manager of the Colombian Petroleum Co., a subsidiary of the Gulf Oil Co., had died of wounds received when he was stabbed by a Colombian after a dispute last week.

SERVICE ON NEW FIELDS

Cunningham Field, Kingman County, Kansas

Compiled by The Oil and Gas Journal, August 15, 1932

LOCATION OF FIELD

Approved name.

Cunningham Pool.

Geographic location.

Northwest corner of Kingman County, Kansas, on the Ninnescah River, about 2½ miles north of the town of Cunningham.

Principal towns and cities near field.

The nearest town is Cunningham, with Wichita, Kans., about 50 miles to the east. Tulsa, Okla., is about 250 miles away with good roads between it and the field. Oklahoma City is also accessible to the field by good roads.

Cities and towns where supply houses have branches.

Cunningham, Kans.; Wichita, Kans.; Pratt, Kans.; Tulsa, Okla.; Oklahoma City, Okla.; Valley Center, Kans.; Eldorado, Kans.; Augusta, Kans.; McPherson, Kans.

Railways serving area.

Cunningham is located on the branch line of the Santa Fe Railway running from Wichita to Pratt, Kans.

Type of sites available for supply houses.

Railway sites can be secured from the A.T.&S.F. Railroad at Cunningham under the usual form of lease for such purposes. There is also privately owned land available for warehouse sites or company houses which can be secured on fixed yearly rental basis.

Character of roads.

Cunningham is located on U. S. Highway 54, known as the "Cannonball" route which extends from Wichita across the State of Kansas. It is paved to Kingman, or about 50 miles, but some work is now being done between Kingman and Cunningham which is to be finished shortly. From Cunningham to the field there are good, all-weather sandy roads, graded and kept in good condition at all times of the year. Roads in Kansas are generally kept up in good shape all the year round and the main highways of both Kansas and Oklahoma are hard surfaced. The trip can be made from Tulsa or Oklahoma City to Cunningham on hard-surfaced roads.

Trucking companies.

There are no trucking companies located in Cunningham yet but there are several trucking contractors in Wichita and in the older oil field towns in that vicinity who contract trucking to the field. Most material has been moved to location on company trucks hauling direct from point of origin to destination.

Hotel and other accommodations.

There is a country hotel at Cunningham with better accommodations at Pratt, Kans., located about 20 miles to the west of the field; also at Kingman, county seat, about 20 miles to the east. Wichita is a modern city with complete line of housing facilities and it is the nominal headquarters for operators in this portion of Kansas.

Schools and churches.

There are schools and churches in both Cunningham and in the country surrounding the field.

Domestic water supply.

Water is secured in the town of Cunningham and in the field in dug wells. It is a good quality water for domestic purposes.

Electric power and gas companies.

Cunningham is supplied with electric light and gas is also available for domestic purposes. Kingman, Pratt and Wichita have all modern conveniences.

Character of buildings used for warehouses.

Supply store warehouses are usually of the wooden frame type covered with corrugated sheet iron. It is common practice to build this type of structure on concrete piles. Some portable type warehouses are also used in this territory made of fabricated structural steel frame covered with corrugated sheet iron. Many of the warehouses are provided with upper floors for sleeping quarters for the employes.

General remarks.

This region is typical of Kansas wheat belt country. The surface is a gently rolling sandy plain at an elevation of about 1,675 feet above sea level. The summers are warm with sufficient rain for grain growing, with winters cold and considerable snow. The weather gets cold enough during severe storms to necessitate the rigs being closed in for winter drilling. While Cunningham is a small town of about 300 to 400 population there are larger towns and cities within easy driving distance of the oil field and most of the shopping is done there. There are country schools and churches near the oil field with institutions of higher learning in the larger towns and cities. Pratt, Kans., about 20 miles to the west of Cunningham, is receiving a good deal of patronage from the oil men at this time because of its proximity also to the Barton arch.

DEVELOPMENT

Date of discovery of field.

The first well, known as Skelly Oil Co.'s No. 1 Frank C. Miles, was started August 28, 1930, and completed January 17, 1931, and drilled all the way with cable tools.

Completions to date.

Skelly Oil Co. has completed to date its No. 1 Frank C. Miles, No. 1 F. C. (North) Miles and No. 1 Leisman.

Number of operations August 10.

Skelly Oil Co.'s No. 1 Leisman was drilled to the Lansing formation and completed there and is producing through the bradenhead. It has drilled deeper into the Arbuckle lime.

Acres of land leased August 10.

The Skelly Oil Co. has about 21,347 acres of land leased in Kingman and Pratt Counties in the general vicinity of these wells. Other major companies having leases in the area are Empire Gas & Fuel Co. for the oil and Cities Service Co. for the gas rights, Shell Petroleum Corp., Consolidated Oil Co., Gypsy Oil Co., Continental Oil Co., and Slick, Pryor & Lockhart, with numerous other small holdings.

Future activity.

The Skelly Oil Co. owns a large block of acreage in this area and has been the only operator there to date. It has completed three wells and has produced them at a voluntarily prorated rate. The deep test, No. 1 Leisman, has been completed in the Arbuckle lime. Future work will depend upon results obtained in this deep test and the demand for oil from the wells already completed to the Lansing; also to some extent upon the demand for gas which has been found in commercial quantities in upper sands penetrated in drilling the oil wells. There is a good volume of gas coming along with the oil and there may be a market developed for it which will have some effect upon future rate of development for the field.

Type of drilling equipment used.

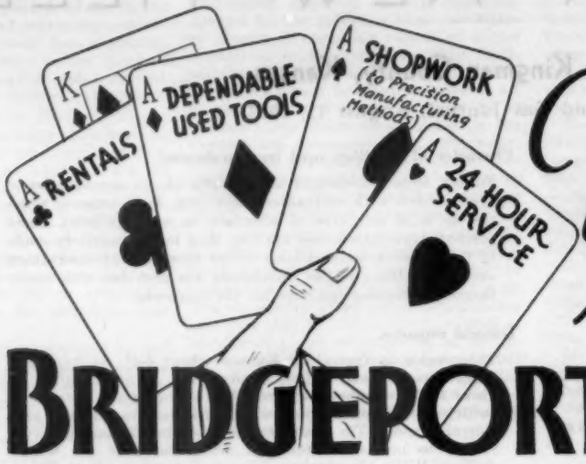
The first well, being a wildcat, was drilled with cable tools. The second and third wells were drilled with rotary to the top of the Lansing formation and completed, or drilled in, with cable tools. Rotary outfits will be used on future wells in this area.

Derricks.

Combination derricks 122 feet high are being used in this field.

Fuel.

The first well was drilled with fuel oil but plenty of gas is now available from completed oil wells for future development in this field.



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Rental Rates Reduced 35% to 50% on Most Tools

Real savings on your rental needs can be made by using Bridgeport's rental service, based on a new 6-day minimum on all rental tools, with the exception of Swan Underreamers (on which the minimum remains at 10 days) and complete strings of cleaning out tools (on which the minimum is 14 days).

Note the big savings on rental prices on the tools listed below:

	New 6-day Price
6 5/8" Hychrome Combination Socket	$ 9.25
6 5/8" Bridgeport one-piece Hollow Reamer	9.00
20" Drive Head	21.15
6 5/8" Elevator, with links	3.50
Complete strings of cleaning out tools for 5 3/16" Hole	$100.00 for 14 days
Complete strings of cleaning out tools for 6 5/8" Hole	$120.00 for 14 days

(Boilers, engines, casing and pipe not included with above).

UNDERREAMER RENTAL PRICES REDUCED 50%

In line with the general reduction in rental prices, Bridgeport has cut the rental rates on Regular Type Swan Underreamers a flat 50%, on the same 10-day minimum rental basis (with either plain or hard face cutters). Rates for additional days also reduced 50%. The regular charge is made for hard face cutters.

If the rental outfit is returned within 3 days, and only one set of regular cutters used, an additional $25.00 discount is allowed. Hard face cutters can also be rented for the New Type Swan, ready to run without field dressing—subject to a nominal charge for re-hard-facing used cutters. Wire or phone us COLLECT for full information and prices on other rental tools.

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Every Bridgeport Branch carries large stocks of dependable used tools and equipment, casing, line pipe, drill pipe and tubing. Every used tool and string of pipe we offer is carefully inspected and guaranteed to be in first class condition. We buy for CASH—getting the cream of the used equipment available, at the lowest possible prices. Wire or phone your nearest Bridgeport Branch FIRST—COLLECT—for anything you may need in used equipment or tubular goods.

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Our shops at Wichita, Kansas are fully equipped to render the highest possible grade of shop work. All shop work done to precision manufacturing methods, by expert operators. When you have your shop work done at Bridgeport, you always KNOW that it will be done right—and at the lowest possible cost, consistent with good work. Get our prices first. Phone your nearest Bridgeport branch.

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Bridgeport carries complete stocks of Aquagel and Baroid, the well-known drilling muds, at all its branch stores. These products can also be purchased through your supply stores. Beware of inferior muds now on the market. Call us collect, and ask for Aquagel or Baroid.

SERVICE ON NEW FIELDS

Cunningham Field, Kingman County, Kansas

(Continued from Page 33)

Size and type of boilers.

For the rotary rigs it is common practice to use two 100 horsepower locomotive type oil field boilers, and in many instances a third boiler is in reserve. Steam pressure of about 250 pounds is usually maintained.

Engines.

Twelve by twelve-inch twin-cylinder steam engines used on rotary rigs.

Type of bits and stems.

A 6-inch drill stem and 13¾-inch rock bits were used in drilling No. 1 F. C. (North) Miles. A 4-inch drill stem and 7⅞-inch rock bit were used in drilling No. 1 Leisman.

Size of hole and casing program.

In the cable tool drilled hole, Skelly Oil Co.'s No. 1 Frank C. Miles, 65 feet of 24-inch casing was set as a surface string, followed by 89 feet of 20-inch, 809 feet of 15½-inch, 2,009 feet of 12½-inch cemented with 150 sacks of cement, 2,490 feet of 10¾-inch cemented with 30 sacks of cement, and 3,406 feet of 8¼-inch cemented with 175 feet of cement; total depth of hole, 3,465 feet.

The second well, Skelly Oil Co.'s No. 1 F. C. (North) Miles, was a rotary drilled hole in which 269 feet of 20-inch surface pipe was set. The hole was then reduced to 8¼-inch and drilled to the top of the Lansing formation where 3,411 feet of 5⅛-inch casing was set and cemented.

In the third well, Skelly Oil Co.'s No. 1 Leisman, a rotary outfit was also used to drill to the top of the Lansing formation. In this well the company set 20-inch surface pipe then reduced the hole for 10-inch casing set just above the Lansing formation and cemented. Below the Lansing a string of 8¼-inch casing has been set and cemented to permit production of the oil from the Lansing between the 10 and 8¼-inch casing and through bradenhead at the top of the well. The well was then drilled to the top of the Viola formation and a string of 6⅝-inch casing 3,920 feet long was set and cemented. The hole was then reduced and the Viola and lower Simpson drilled and 4,094 feet of 5⅛-inch casing set on top of the Arbuckle ilme. The 5-inch hole has been carried 1 foot into the Arbuckle lime which will be tested. While the well has been drilled through the Viola, lower Simpson and into the Arbuckle lime it has been producing some oil between the 10 and 8¼-inch strings of casing.

Report from Skelly Oil Co.'s No. 1 Leisman August 15 gave total depth as of that date at 4,139 feet or 46 feet in the Arbuckle lime. At 30 feet in this lime it is reported that the well made 8,500,000 feet of gas but further data is not available because they are still drilling in the Arbuckle and have the hole loaded with heavy mud. Rock pressure estimated at from 1,800 to 1,900 pounds per square inch. The top of the Arbuckle was found at 4,093 feet.

Tubing used.

Skelly Oil Co.'s No. 1 Frank C. Miles has been produced through a string of 3-inch tubing which is provided with a bottom-hole choke and an adjustable bean at the tubing head which was opened to one-eighth inch size. Back pressure of from 500 to 600 pounds was maintained on the well while it was produced. Both Lansing wells are now entirely shut in because of lack of demand for this oil and necessity of shipping whatever is produced by tank car to the refinery at Eldorado, Kans.

Company or contractor's tools.

The three wells drilled in this field to date have all been contracted and Oklahoma City type of rotary equipment has been used down to the top of the Lansing formation with cable tools used for drilling in.

Speed of drilling.

The formations are not hard to drill and with the rotary outfit good time is made. With the cable tool wildcat discovery well slower time than normal was made because it was necessary to feel ahead in the first hole in this area.

Character of mud.

Natural mud weighing about 10 pounds per gallon.

Slush pumps.

Two 15"x7¼"x20" steam slush pumps used on rotary rigs.

Water supply.

The wells are all located close enough to the Ninnescah River to secure an ample supply of good boiler water. This water has given no trouble by forming scale or foaming and should be available for other wells in this field.

Rig builders and contractors.

Rig builders and contractors for all kinds of field work are available from other oil fields of Kansas and northern Oklahoma. Tank setting crews can be secured in Valley Center, McPherson and Wichita, Kans.

GENERAL GEOLOGY

Surface geology is lacking in this area because it is covered with a deep bed of loose sand and core drilling was resorted to in order that the structure could be worked out. Cored holes about 400 feet deep were drilled to the Permian formation in mapping the surface structure. In the discovery well the following gas sands were logged:

Depth (feet)	Formation	Casing	Gas volume (feet)
1,520-30	Anhydrite, dolomite	Behind 15½"	500,000
1,635-40	Anhydrite, dolomite	Behind 15½"	2,000,000
1,780	Lime	Behind 12½"	250,000
2,005-25	Lime	Bradenheaded—12½ and 10"	5-6,000,000
2,130-42	Oolitic lime	Bradenheaded—12½ and 10"	4,000,000
2-475-90	Sandy shale	Behind 8¼"	250,000
3,035-40	Lime	Behind 8¼"	100,000
Total gas			13,000,000

There is about 10,000,000 feet of gas bradenheaded between the 12½ and 10-inch casing.

No. 1 Leisman had two additional gas pays. One, believed to be the Kansas City lime, was found between 3,500 and 3,600 feet and made 26,163,000 feet of gas on test and built up 1,450 pounds pressure in 12 hours. The Simpson formation tested 9,000,000 feet of gas. It built up 1,475 pounds pressure in 12 minutes. This structure is evidently high as there is a short section of the Pennsylvanian formations and no Mississippi lime present. The Lansing formation is an upper member of the Pennsylvanian system.

PRODUCTION PRACTICE

Methods of producing oil.

The wells so far opened in the Cunningham Pool have had a natural flow and because of the limited outlet from the field have been shut in for the time being. Tubing has been run in one well and it has been produced through bottom-hole choke and one-eighth inch adjustable bean at tubing head and about 500 pounds back pressure. The Lansing formation from which the main production is now coming apparently has ample natural energy to flow the oil for a long time to come.

Gravity of oil.

The oil produced from the Lansing lime is of paraffin base and is between 36 and 37 gravity A.P.I. scale.

Separators and tankage.

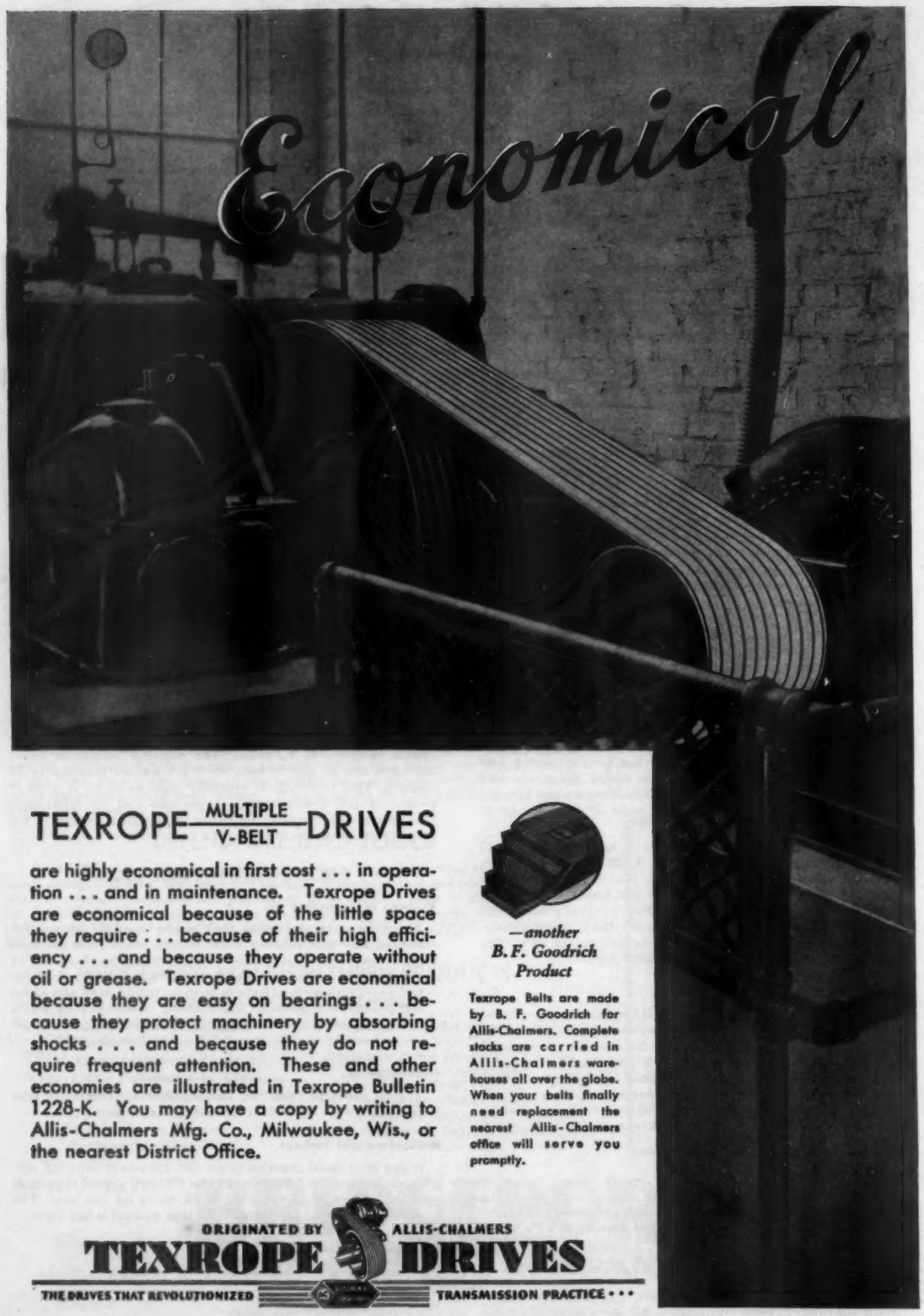
It has been usual practice to set one 125-pound capacity separator at each well followed by one 210-bbl. welded flow tank and a battery of four 250-bbl. stock tanks for the lease. The stock tanks are of the bolted steel type and made gas tight.

Pumping conditions.

No wells have had to go on the pump to date.

Water conditions.

No water has been encountered with the oil in wells so far completed.



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TEXROPE DRIVES

THE DRIVES THAT REVOLUTIONIZED TRANSMISSION PRACTICE • • •

SERVICE ON NEW FIELDS

Cunningham Field, Kingman County, Kansas

(Continued from Page 35)

Paraffin.

While the oil is a paraffin base oil no trouble has been experienced to date with accumulation in tubing or casing or in pipe lines.

Cut oil.

No cut oil or emulsions have been made in wells thus far produced.

Shooting wells.

In completing the second well in the pool, Skelly Oil Co.'s No. 1 F. C. (North) Miles, it was given two shots, the first of 15 quarts and the second of 10 quarts size. The light shots were used because of closeness of casing to producing formation—the Lansing.

GENERAL DATA

The Cunningham Field, in the northwest corner of Kingman County, Kansas, is of interest at this time because of the showings secured in the three wells so far drilled by the Skelly Oil Co. on its acreage there. This company owns about 21,000 acres of oil and gas leases in the immediate vicinity of the discovery well and there are a number of other major companies interested also.

The structure was outlined by core drilling and when tested the wells indicated that they are located upon a structural high with upper Pennsylvanian formations laying unconformably on lower Mississippian shale and dolomite, which, in turn, rest upon the Ordovician limestone.

While the present production is coming from the Lansing lime, an upper member of the Pennsylvanian system, the lower Pennsylvanian and Mississippian formations are abnormally thin due to nondeposition or removal by erosion on this high.

The area of this structural high has not been fully outlined but enough is known to insure it being a commercial gas and oil field. The rate at which it will be developed will depend upon general demand for oil and other economic conditions.

Character of gas.

The gas so far produced from the three wells has all been reported as dry but no actual tests or laboratory analysis have been made.

Gasoline plants.

There are no natural gasoline plants in this field to date. There will be an outlet for natural gas later because several of the major companies' large gas systems are laid close to the field. These mains can be tapped for gas from this field and it is understood that there is a large supply of gas in reserve in the upper formations. There is also a good supply of gas under high pressure in the upper part of the Lansing formation from which the present oil is being produced.

Outlet for oil.

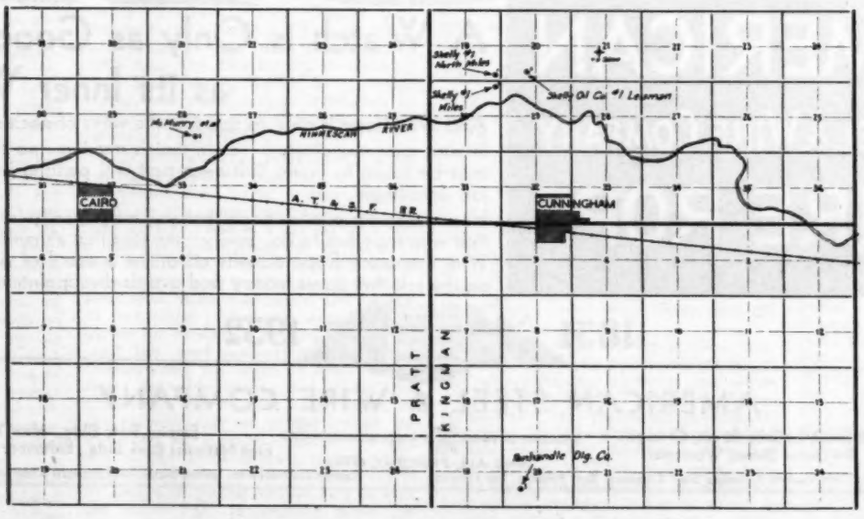
This field was opened January 2, 1931, by the discovery of oil in the wildcat well drilled by Skelly Oil Co. and known as its No. 1 Frank C. Miles located in the NE NW, Section 30-27s-10w, in Kingman County. This well had an initial production of about 325 bbls. of oil per day accompanied by about 1,000,000 feet of gas. It was later tubed and pinched back to a daily production of about 75 bbls. per day which was delivered to tank cars at loading rack on A.T.&S.F. Railway right of way at Cunningham, Kans., through a 4-inch pipe line from the field. The second well produced about 225 bbls. initial through the 5-3/16-inch casing fitted with adjustable bean at casinghead and when produced was allowed to make only 75 bbls. of oil per day. Both of these wells are now shut in entirely because of lack of demand for this oil, but a small amount of oil is being produced from No. 1 Leisman through bradenhead on 10 and 8¼-inch casing.

This voluntary curtailment of production in this new field has been made by the Skelly Oil Co. because it has contracts for other oil to run to its refinery at Eldorado, Kans., and the Cunningham Field oil is therefore being shut in until there is a change in these conditions.

With a greater demand for Cunningham Field oil it will be possible to extend an 8-inch all-welded pipe line now terminating at Burton, Kans., on to this new field. There are no plans for such extension at this time and it is only mentioned as offering one means of securing an additional outlet from this field when conditions warrant.

The Sinclair Prairie Pipe Line Co. also has an 8-inch line between Eldorado and Rice County, Kansas, that passes about 30 miles north of the Cunningham Field. It would be a simple matter to run a branch line from Cunningham Field to this Sinclair Prairie pipe line and furnish an outlet from this area. This also is merely conjecture and so far as known no such line is contemplated at this time.

There is also a possibility that at some time there will be developed an outlet for the great quantities of gas found in the upper formations in this area. Several major gas pipe lines extend through this immediate vicinity and as demand occurs they can be tapped into to furnish an outlet and use for this natural gas. At present all gas is shut in.



Map of Cunningham Pool, Kingman County, Kansas

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New Proration Order in East Texas 43 Barrels; Overage of Production Weakening Market

By L. E. BREDBERG

DALLAS, Tex., Aug. 15.—A new proration order for East Texas goes into effect on August 16, curtailing the wells another barrel, to 43 bbls. per well per day. The daily well allowable is now 44 bbls. The new allowable will remain in effect until September 1. Prior to that time the Railroad Commission will hold a hearing at Austin relative to changing the proration plan for the district. It is believed that a per well and per acreage basis, similar to the Conroe Field plan, will be adopted for the field, although many are in favor of continuing with the present plan, rather than risking chances of upsetting the equilibrium of the situation. There are now in the neighborhood of 7,400 producers in the field.

Locations in the field continue to dwindle, falling off 14 more this week to 110, while completions increased 15 over the previous week, or to 142 this week. The 27 largest leaseowners in the field have an average of one well to every 18.85 acres, while all others have one well to each 10.88 acres, based on an estimated 113,904 producing acres in the field.

Weakening the Market

By-passing and theft of oil, resulting in an overage of production from the field, continues to be reported, weakening the market in the district. One large independent purchaser in the field is considering reducing the posted price 25 cents per barrel in order to meet the competition of small refineries which are purchasing crude below the 98-cent posted price. Tank trucks are reported to be hauling considerable oil from the field to the smaller refineries at night.

One well was found to be flowing through tubing and casing this week, going into one separator from which gas was not escaping from the gas vent. Upon investigation it was found that the gas was being drawn off through another line from the separator and used in an engine which was driving a 5 by 12 pump at the rate of 60 strokes a minute. The pressure gauge on the pump showed a pressure of 600 pounds, denoting that it was pumping against main line pressure.

Many reports are forthcoming from the field stating the different methods of running and disposing of excess oil, but it is a difficult task to check up even a part of the rumors, and with only 11 national guardsmen on duty in the field, there is hardly any method possible whereby all or even a small part of the illegal producers and transporters of crude can be apprehended. And with no cases tried, and no convictions by the courts against those who have already been indicted for by-passing and theft of oil, men in authority in the field wonder what is the use of apprehending and putting under arrest anyone found overproducing his lease, or illicitly transporting oil from the field.

Two more men have been named on the committee appointed by President Amos L. Beaty of the American Petroleum Institute to audit the records of all major purchasing companies operating in East Texas in an effort to confirm or discredit the many rumors broadcast that major pipe line companies were also violating proration orders by running illegally produced oil. These two men are J. R. Parten, president of the Woodley Petroleum Co. of Shreveport, and also president of the Texas division of the Independent Petroleum Association, and S. A. Guiberson, Jr., of Dallas, an independent operator in East Texas. J. G. Pew, Capt. J. F. Lucey and Col. L. S. Davidson, all of Dallas, were the first three men named by Mr. Beaty. Mr. Pew is chairman of the committee which has a vast amount of work scheduled in checking all leases connected to by major pipe line companies, amount of oil run as shown by their records, stocks on hand, and receipts. It is hoped that all major pipe line companies will co-operate with the committee and submit their books as requested. However, the audit is not compulsory, and may therefore not be complete.

Turning Back Connections

The Empire Pipe Line Co. has turned back 57 connections to the Tidal Refining Co., which will be forced to run the oil to storage from the wells connected. Empire is the second company in the field to break loose from connections, the Stanolind Oil & Gas Co. turning over a good many connections to the Humble Pipe Line Co., as mentioned in the August 11 issue of The Oil and Gas Journal. All but three or four of the major purchasing companies have reached the saturation point in regard to connections, and several have not taken any new connections for the past few weeks.

Cherokee County

Rayborn & Glasscock's No. 1 Anne Kelly, in the M. De Los Santos Coy Survey, approximately one-half mile southwest of the nearest producer, Cherokee County, apparently checks production to the southwest of the field as it has failed to log saturated Woodbine sand at 3,707 feet, indicating that the productive horizon has been passed, and that the hole is dry.

Dry Hole in Gregg

Two more dry holes were added to the east side of the field also. Corbin & Culp's No. 1 Alexander in the D. Sanches Survey, northern Gregg County, was abandoned in Georgetown lime at 3,601 feet, after topping that formation at 3,598 feet. The Humble Oil & Refining Co.'s No. 1 J. R. Smith, in the same survey, was abandoned at 3,698 feet in Georgetown lime, after encountering that formation at 3,692 feet.

Two more wells are going on the pump, one on the eastern edge of the field in the Kilgore area, Gregg County, and the other on the northwestern side of the field, Upshur County. Tidal Oil Co.'s No. 1 Elder requires agitation to make it flow its allowable, and will be put on the beam. Total depth is 3,597 feet in Georgetown lime. Sand was logged from 3,502-41 feet, which is far more sand than required for producing in this field, if the sand has good saturation and is not thinned down too much by other formations. Reynolds-Dorman and others' No. 1 Miller, in the William King Survey, on the extreme edge of production on the northwest in Upshur County, was also put on the pump to make its allowable. Sand was logged in this well from 3,760-97 feet, and bottom of the hole is near the water line. It formerly made 125 bbls. in 10 hours on a test, but has failed to maintain that rate of production.

Daily average distribution from the field for the week ending August 12 showed main lines running 330,266 bbls., refineries 16,850 bbls., and tank cars carrying 3,260 bbls., distribution averaging 350,376 bbls. per day, while production averaged 322,170 bbls.

Wildcatting Activities

There were three wildcat tests abandoned in the district during the week, one in Cherokee, one in Lamar and one in Rains County. Joiner and others' No. 1 Martin, in the D. Parker Survey, an interesting Cherokee County test, was abandoned at 3,822 feet after testing salt water on drill stem test from 3,816-22 feet. It topped the sand at 3,816 feet. Doyle & Jondeau's No. 1 Horm, in the R. P. Mayor Survey, Lamar County, was abandoned at 2,958 feet, and C. H. Bayless' No. 1 Ownby, in the Alexander Survey, Rains County, was abandoned at 4,986 feet. It was formerly drilled to 4,036 feet, but was recently deepened, topping the Woodbine sand at 4,432 feet, that formation proving dry.

There were five wildcat locations staked in the district this week, wildcatting continuing at an active pace, while lease and royalty trading continues brisk, several new blocks being reported each week, most of them taken on drilling contracts.

Waitman and others have derrick up on the L. J. Dearman farm in the J. T. Peavy Survey, 2½ miles southeast of Savalla in Angelina County. The Paris Oil Co. has made location for its No. 1 O. S. Bain in the R. M. Williamson Survey, Ellis County.

Starling and Preston have derrick up on their No. 1 Mrs. Lizzie Henderson in the Reuben Bennington Survey, 3 miles north of the town of Jefferson in Marion County. They have a 5,100-acre block in this area. The test will be drilled to 4,000 feet.

Cannon and others' No. 1 Roberts in Romera Survey, Polk County, has a rig up and is shut down.

J. Jeagen's No. 1 Needham, 3¼ miles southwest of Laneville, in the J. H. Chambers Survey, Rusk County, has spudded.

Burnham's No. 1 Weiss in the J. Dean Survey, Bowie County, has cored hard red sand, said to be in the lower Trinity, having slight showing of oil from 3,717-27 feet, and are now reaming to make a drill stem test.

Freestone County

Clyde Creighton's test in Freestone County, mentioned last week as having a rig up, is on a 3,900-acre block centering in the W. D. Allison, A.B.&M., J. T. Carlile and McGrew Surveys, 3 miles north of Keechi on the Leon-Freestone County lines. It will go to 4,500 feet.

Gibson and Johnson are to drill a Trinity test on part of the Ryan Consolidated Oil Co.'s block centering in the F. O'Neil Survey, west of the Bethany gas field. Brandon and McCamey of Fort Worth have contracted to drill the test.

Chandler's No. 1 Walker in the J. Gordon Survey, Hunt County, located on an old fault extending northeast and southwest, formerly given a test by Gulf Production Co., has created considerable excitement. It was high on base of the Austin chalk, but reported low on the Woodbine sand. Three drill stem tests were attempted, all failing. It cored 4½ feet deeper, showing Woodbine sand. It is now fishing and total depth is 2,870 feet.

Franklin and Hopkins Counties

Northern Franklin and northeastern Hopkins Counties are the scene of considerable activity, independent operators taking the most active part, although some are said to be purchasing for a couple of major companies. The play extends along a fault line lying northeast and southwest of Harper's No. 1 fee, which is still fishing for a slip at 3,285 feet. Ten thousand acres was recently taken by W. H. Ashby of Dallas, as mentioned in the August 4 issue of The Oil and Gas Journal. Several tests have been drilled along this fault, and with renewed interest in it, others may follow regardless of the outcome of the present test by Harper.

R. L. Peveto and Fred Prince have taken a 4,000-acre block lying south of Talco in Titus County, and will start a Woodbine test on the block by September 1.

Van Field, Van Zandt County

The Pure Oil Co. abandoned its No. 5 A. W. Ellison in the James Rose Survey, near the southwest corner of the field, at a total depth of 3,000 feet, showing salt water at 2,980 feet. The test is on the original unitized block, and cuts down the potential producing area of the field in that direction.

The latest proration schedule on the field, compiled by F. H. Pierson, umpire, shows slightly better than 4,327 acres proven to production, with 1,164,628.55 productive acre feet of sand lying above a subsea depth of 2,500 feet.

COMPLETIONS IN EAST TEXAS

Cherokee County

Davis and others' No. 1 Annie Kelly, top sand 3,675 feet, initial production 44 bbls. in one-half hour through open 2-inch tubing, total depth 3,681 feet. Mid-Kansas Oil & Gas Co.'s No. 20 M. M. Cross, top sand 3,654 feet, initial production 44 bbls. per hour on 2-inch lead, total depth 3,659 feet.

North Gregg County

Arkansas Fuel Oil Co.'s No. 6-C Lathrop, top sand 3,585 feet, initial production 35 bbls. in one-quarter hour through 2-inch tubing choke, total depth 3,606 feet; No. 6 Whittaker, top sand 3,523 feet, initial production 46 bbls. in one-quarter hour through 2-inch tubing choke, total depth 3,547 feet; No. 4 Snoddy, top sand 3,543 feet, initial production 43 bbls. in one-quarter hour through 1½-inch tubing choke, total depth 3,567 feet.

Atlantic Oil & Production Co.'s No. 12-A Burnside, top sand 3,508 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,531 feet; No. 14-A E. Burnside, top sand 3,522 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,542 feet; No. 7 Judge, top sand 3,498 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,525 feet; No. 10 Judge, top sand 3,503 feet, initial production 35 bbls. per hour through tapered tubing, total depth 3,526 feet; No. 13 Judge, top sand 3,502 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,522 feet; No. 18 J. Moore, top sand 3,523 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,545 feet. Atlantic and Sun Oil Co.'s No. 9 M. Hays, top sand 3,484 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,574 feet; No. 17 M. Hays, top sand 3,484 feet, initial production 33 bbls. per hour through tapered tubing, total depth 3,540 feet; No. 22 M. Hays, top sand 3,480 feet, initial production 64 bbls. per hour through tapered tubing, total depth 3,529 feet.

Barnsdall Oil Co.'s No. 5 R. E. L. Ferguson, top sand 3,651 feet, initial pro-

duction 30 bbls. in one-quarter hour through 1-inch tubing choke, total depth 3,676 feet. Brown Eagle Oil Co.'s No. 2 T.&P. Railroad, top sand 3,592 feet, initial production 120 bbls. per hour through 1½-inch tubing choke, total depth 3,630 feet. Columbia Oil & Gas Co.'s No. 3 Dollahite, top sand 3,648 feet, initial production 76 bbls. per hour through three-quarter inch tubing choke, total depth 3,690 feet. Corbin & Culp's No. 1 C. H. Alexander, top Georgetown lime 3,598 feet, dry and abandoned, total depth 3,601 feet (D. Sanches Survey). Cranfill & Reynolds' No. 2-B Barnwell, top sand 3,498 feet, initial production 30 bbls. in one-quarter hour through 2-inch open tubing, total depth 3,531 feet. Dyke Oil Corp.'s No. 5 J. Christian, top sand 3,560 feet, initial production 46 bbls. in 18 minutes through 2-inch open tubing, total depth 3,597 feet.

Empire Gas & Fuel Co.'s No. 6 Bander, top sand 3,562 feet, initial production 37 bbls. in one-quarter hour through 2-inch tubing choke, total depth 3,630 feet; No. 10 T. W. Lee, top sand 3,516 feet, initial production 35 bbls. in one-quarter hour through 2-inch tubing choke, total depth 3,558 feet. Faith Oil Co.'s No. 2 Fuller, top sand 3,655 feet, initial production 62 bbls. in one-half hour through 2-inch open tubing, total depth 3,688 feet. Gulf Production Co.'s No. 20 Judge, top sand 3,498 feet, initial production 80 bbls. per hour through three-quarter inch tubing choke, total depth 3,531 feet. Hankamer & Cockran's No. 1 C. L. Taylor, top sand 3,567 feet, initial production 65 bbls. per hour through tubing, total depth 3,582 feet.

Humble Oil & Refining Co.'s No. 4 A. L. Hughes, top sand 3,603 feet, initial production 86 bbls. per hour through three-quarters inch tubing choke, total depth 3,639 feet; No. 11 W. R. Hughes, top sand 3,598 feet, initial production 54 bbls. per hour through three-quarters inch tubing choke, total depth 3,627 feet; No. 1 W. C. Mackey, top sand 3,586 feet, initial production 12 bbls. per hour through three-fourths inch tubing choke, total depth 3,591 feet; No. 1 J. R. Smith, top Georgetown lime 3,692 feet, dry and abandoned, total depth 3,698 feet (D. Sanches Survey). Lucey Petroleum Co.'s No. 4 Kinsell, top sand 3,616 feet, initial production 63 bbls. in one-half hour through open tubing, total depth 3,646 feet. Navarro Oil Co.'s No. 4 T. B. Harris, top sand 3,512 feet, initial production 69 bbls. per hour through three-quarters inch tubing choke, total depth 3,533 feet. Pilot Oil Co.'s No. 1-B P. B. Harris, top sand 3,485 feet, initial production 83 bbls. per hour through three-fourths inch tubing choke, total depth 3,509 feet. Rone Oil Co.'s No. 2 Anderson and Slaughter, top sand 3,502 feet, initial production 40 bbls. in one-quarter hour through 2½-inch tubing choke, total depth 3,531 feet.

Sells Petroleum Co.'s No. 4 R. Fisher, top sand 3,563 feet, initial production 45 bbls. in one-quarter hour through 2-inch open tubing, total depth 3,635 feet; No. 5 Fishburn, top sand 3,485 feet, initial production 15 bbls. in one-half hour through tapered tubing, total depth 3,548 feet; No. 12 J. Moore, top sand 3,528 feet, initial production 15 bbls. in one-half hour through tapered tubing, total depth 3,568 feet; No. 14 J. Moore, top sand 3,540 feet, initial production 17 bbls. in one-half hour through tapered tubing, total depth 3,571 feet; No. 17 J. Moore, top sand 3,554 feet, initial production 15 bbls. in one-half hour through tapered tubing, total depth 3,568 feet.

Sinclair Prairie Oil Co.'s No. 8-A J. R. Akins, top sand 3,562 feet, initial production 30 bbls. in 10 minutes through open 2-inch tubing, total depth 3,597 feet; No. 23 Moncrief, top sand 3,556 feet, initial production 44 bbls. in one-quarter hour through 2½-inch open tubing, total depth 3,580 feet. Stroube and Stroube's No. 2-B Anderson Harris, top sand 3,496 feet, initial production 30 bbls. per hour through tapered tubing, total depth 3,545 feet. Stanolind-Simms-Peachblossom's No. 4 J. W. Akin, top sand 3,532 feet, initial production 52 bbls. in one-quarter hour through 2½-inch open tubing, total depth 3,624 feet. Sun Oil Co.'s No. 10 J. M. Haynes, top sand 3,615 feet, initial production 28 bbls. per hour through tapered tubing, total depth 3,682 feet. Swain and Holcomb's No. 1 R. M. Wood, top sand 3,616 feet, initial production 120 bbls. per hour through 2-inch tubing choke, total depth 3,632 feet.

Tidal Oil Co.'s No. 8 J. J. Castleberry, top sand 3,600 feet, initial production 12½ bbls. in 10 minutes through 2-inch open tubing, total depth 3,613 feet; No. 5 W. Christian, top sand 3,558 feet, initial production 15 bbls. in 10 minutes through 2-inch open tubing, total depth 3,586 feet; No. 15 Lake Devernia, top sand 3,493 feet, initial production 16 bbls. in 10 minutes through 2-inch open tubing, total depth 3,535 feet. Washington Oil Corp.'s No. 4 Cobb Heirs, top sand 3,518 feet, initial production 85 bbls. per hour through three-quarters inch tubing choke, total depth 3,577 feet. Douglas Williams' No. 1 Taylor, top sand 3,567 feet, initial production 130 bbls. in one-half hour through 2½-inch open tubing, total depth 3,617 feet. Yount Lee Oil Co.'s No. 5 F. Smith, top sand 3,525 feet, initial production 72 bbls. per hour through eleven-sixteenths inch tubing choke, total depth 3,545 feet; No. 4 J. M. Tuttle, top sand 3,597 feet, initial production 89 bbls. per hour through eleven-sixteenths inch tubing choke, total depth 3,617 feet.

South Gregg County

Arkansas Fuel Oil Co.'s No. 6 Brown, top sand 3,562 feet, initial production 43 bbls. in one-quarter hour through 2-inch tubing choke, total depth 3,586 feet; No. 5 Hughey-Ross, top sand 3,522 feet, initial production 30 bbls. in one-quarter hour through 2-inch tubing choke, total depth 3,550 feet. Burnham and Johnston's No. 1 H. L. Dansby, top sand 3,726 feet, initial production 25 bbls. per hour through open tubing, total depth 3,729 feet. L. C. Collins' No. 1-B Bivens, top sand 3,675 feet, initial production 60 bbls. in one-half hour through open tubing, total depth 3,685 feet. Empire Gas & Fuel Co.'s No. 4 Walker, top sand 3,661 feet, initial production 60 bbls. per hour through 2-inch tubing choke, total depth 3,667 feet. Galvez Oil Co.'s No. 1 E. Strong, top sand 3,734 feet, initial production 23 bbls. in one-quarter hour through three-quarters inch tubing choke, total depth 3,735 feet.

Gulf Production Co.'s No. 14 H. C. Alexander, top sand 3,537 feet, initial production 70 bbls. per hour through three-quarters inch tubing choke, total depth 3,557 feet; No. 1 S. G. Andrews, top sand 3,582 feet, initial production 90 bbls. per hour through three-quarters inch tubing choke, total depth 3,594 feet; No. 31 Hilburn Estate, top sand 3,589 feet, initial production 80 bbls. per hour through three-quarters inch tubing choke, total depth 3,604 feet; No. 4 M. B. Hughey, top sand 3,512 feet, initial production 90 bbls. per hour through three-quarters inch tubing choke, total depth 3,539 feet; No. 5 E. L. Walker, top sand 3,533 feet, initial production 80 bbls. per hour through three-quarters inch tubing choke, total depth 3,550 feet. M. E. Hodges' No. 1 G. Martin, top sand 3,543 feet, initial production 7 bbls. in one-quarter hour through tapered tubing, total depth 3,583 feet. Hunter and Rowe's No. 2 Watson, top sand 3,580 feet, initial production 75 bbls. per hour through open tubing, total depth 3,637 feet.

Jones-Doss Oil Co.'s No. 4 L. Martin, top sand 3,723 feet, initial production 24 bbls. per hour through one-quarter inch tubing choke, total depth 3,726 feet. Bert Kouns' No. 2 Hughey-Ross, top sand 3,520 feet, initial production 95 bbls. per hour through open tubing, total depth 3,562 feet. Louisiana Oil & Refining Co.'s No. 6 Griffin, top sand 3,527 feet, initial production 43 bbls. in one-quarter hour through 2-inch tubing choke, total depth 3,551 feet. John E. Mabee's No. 2 M. T. Cole, top sand 3,548 feet, initial production 110 bbls. in one-half hour through open tubing, total depth 3,560 feet.

Mead Oil Co.'s No. 2 L&G.N.R.R., top sand 3,643 feet, initial production 65 bbls. per hour through three-quarters inch tubing choke, total depth 3,604 feet. John Murphy's No. 1 W. P. Crews, top sand 3,747 feet, initial production 31 bbls. in one-half hour through pinched tubing, total depth 3,749 feet. Albert Plummer's No. 3 Beallie Estate, top sand 3,666 feet, initial production 45 bbls. in one-half hour through open tubing, total depth 3,669 feet. Producers Investment Co.'s No. 2 Crim, top sand 3,528 feet, initial production 75 bbls. per hour through open 2-inch tubing, total depth 3,597 feet.

Red Star Oil Co.'s No. 2 Smith, top sand 3,542 feet, initial production 60 bbls. in one-half hour through open 2-inch tubing, total depth 3,570 feet. Refugio Oil Corp.'s No. 2 M. B. Hughey, top sand 3,512 feet, initial production 55 bbls. in one-half hour through 1-inch tubing choke, total depth 3,560 feet. Salmon Oil Co.'s No. 2 Wills Smith, top sand 3,528 feet, initial production 60 bbls. in one-half hour through open tubing, total depth 3,610 feet. Shell Petroleum Corp.'s No. 5-A Bivens, top sand 3,561 feet, initial production 15 bbls. in one-half hour through tapered tubing, total depth 3,601 feet; No. 7-A John Douglas, top sand 3,587 feet, initial production 15 bbls. in one-half hour through tapered tubing, total depth 3,604 feet; No. 5-B J. S. Elder, top sand 3,523 feet, initial production 15 bbls. in one-half hour through tapered tubing, total depth 3,561 feet; No. 19 Watson, top sand 3,563 feet, initial production 15 bbls. in one-half hour through tapered tubing, total depth 3,634 feet. Sinclair Prairie Oil Co.'s No. 20-B A. A. King, top sand 3,430 feet, initial production 40 bbls. in one-quarter hour through open tubing, total depth 3,462 feet; No. 9-B A. A. King, top sand 3,418 feet, initial production 45 bbls. in one-quarter hour through open tubing, total depth 3,457 feet; No. 10-B A. A. King, top sand 3,428 feet, initial production 30 bbls. in one-quarter hour through open tubing, total depth 3,460 feet; No. 10 A. A. Lockhart, top sand 3,655 feet, initial production 30 bbls. in one-half hour through open tubing, total depth 3,665 feet. H. R. Smith, Inc.'s No. 2 D. M. Peterson, top sand 3,547 feet, initial production 46 bbls. in 10 hours pinched, total depth 3,590 feet. Sun Oil Co.'s No. 5 C. Brown, top sand 3,581 feet, initial productioin 51 bbls. per hour through tapered tubing, total depth 3,640 feet; No. 9 M. T. Cole, top sand 3,522 feet, initial production 49 bbls. per hour through tapered tubing, total depth 3,556 feet.

The Texas Company's No. 2 Redford, top sand 3,666 feet, initial production 100 bbls. per hour through open tubing, total depth 3,674 feet. Tidal Oil Co.'s No. 11 Barton, top sand 3,605 feet, initial production 75 bbls. per hour through open tubing, total depth 3,617 feet; No. 13 Bivens, top sand 3,624 feet, initial production 50 bbls. per hour through open tubing, total depth 3,634 feet; No. 8 Hughey-Ross, top sand 3,495 feet, initial production 55 bbls. per hour through three-quarters inch tubing choke, total depth 3,517 feet. Welch and Sandler's No. 7 R. W. Barnett, top sand 3,727 feet, initial production 60 bbls. in one-half hour through open 2-inch tubing, total depth 3,729 feet.

North Rusk County

Wellington's No. 2 George Thompson, top sand 3,645 feet, initial production 31 bbls. in 20 minutes through 1-inch tubing choke, total depth 3,690 feet. G. & A. Oil Co.'s No. 2 W. Roberson, top sand 3,598 feet, initial production 30 bbls. per hour through 1-inch tubing choke, total depth 3,675 feet. Hendershot and others' No. 1 Green Washington, abandoned, total depth 2,400 feet (D. Clark Survey). Humble Oil & Refining Co.'s No. 2 T. Barton, top sand 3,636 feet, initial production 23 bbls. in one-half hour through three-quarters inch tubing choke, total depth 3,744 feet; No. 8-B Henry Sexton, location abandoned; No. 4 J. Wooley, location abandoned. C. O. Kelley's No. 2 Brock Estate, top sand 3,658 feet, initial production 45 bbls. per hour through three-quarters inch tubing choke, total depth 3,668 feet. Navarro Oil Co.'s No. 7 Brightwell, top sand 3,620 feet, initial production 62 bbls. in 45 minutes through open tubing, total depth 3,669 feet. Patterson Drilling Co.'s No. 2 Brock heirs, top sand 3,637 feet, initial production 45 bbls. per hour through three-quarters inch tubing choke, total depth 3,652 feet. Republic Production Co.'s No. 2 Nat Bean, top sand 3,592 feet, initial production 45 bbls. in one-half hour through open tubing, total depth 3,604 feet. Shell Petroleum Corp.'s No. 10 Rose Russell, top sand 3,683 feet, initial production 14 bbls. in one-half hour through tapered tubing, total depth 3,739 feet.

Stanolind Oil & Gas Co.'s No. 3 C. O. Christian, top sand 3,643 feet, initial production 44 bbls. in 33 minutes through 2-inch open tubing, total depth 3,645 feet. Sun Oil Co.'s No. 2 A. A. King, top sand 3,696 feet, initial production 33 bbls. per

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East Central Texas Wildcats

Week Ending August 15

ANDERSON COUNTY

Company, well, farm name, section and block—	Remarks:
Frazier et al's No. 1 H. L. Hudson, 300 ft. from S line and 300 ft. from W line of 196-ac. tract, M. Rionda Sur.	Derrick.
Rosser and Pendleton's No. 1 M. A. Davy, 660 ft. from N line and center of E and W lines of tract and survey, P. G. Adams Sur.	Derrick.
C. R. Wilmuth et al's No. 1 N. B. Watson, 500 ft. from W line and 4,950 ft. from N of S line of survey in 8⅓ of 139-ac. tract, M. Main Sur.	T.D. 1,538 ft.

ANGELINA COUNTY

Waitman et al's No. 1 L. J. Dearman, 350 ft. from S and W lines of 20-ac. tract, J. T. Peavy Sur.	Derrick.

BOWIE COUNTY

Roy Anderson's No. 1 Dykes, 2 miles W of Texarkana, M. Dykes Sur.	S. D. 1,252 ft.
Burnham-Robertson and Greer's No. 1 F. O. Weiss, 356 ft. from N line and 300 ft. from W line of B. H. Williams 50-ac. tract, Jessie Dean Sur.	Top sand 3,296 ft.; S.D. 3,723 ft.

CHEROKEE COUNTY

Barkley Tate et al's No. 1 H. E. Neal, 330 ft. from N and W lines of tract, J. M. Prosella Sur.	Derrick.
Bridges and Candler's No. 1 Berryman, center of Berryman tract, H. Kimble Sur.	S.D. 1,000 ft.
Pure Oil Co.'s No. 1 W. B. Nicholson, 300 ft. from S and E lines of 72-ac. tract, R. Stewart Sur.	Location.
Rayburn and Glassco's No. 1 Annie Kelley 1,714 ft. S and 2,210 ft. W of NW cor. of Pilot Oil Co.'s Kelley 10-ac. lease, M. De Los Santos Coy Sur.	T. D. 3,711 ft.; moving off rig.
Merry Bros. and Perini's No. 2 Annie Kelley, S offset to Pilot Oil Co.'s No. 1 Kelley, M. D. L. S. Coy Sur.	Drlg. 3,008 ft.
Mid-Kansas Oil & Gas Co.'s No. 4 H. D. Kelly, 330 ft. from S line and 1,875 ft. from E line of lease, M. D. L. S. Coy Sur.	Derrick.
William A. Stone's No. 1 J. T. Perkins, 300 ft. from NW cor. of lease, Thomas Stanford Sur., 5 miles S of Ponta.	S.D. 2,250 ft.; (corrected).
Wilson & Stubbs' No. 1 L. Robert, 450 ft. from S and 150 ft. from W line of lease, J. B. Wolfin Sur.	S.D. 3,170 ft.

DELTA COUNTY

Commerce Oil Co.'s No. 1 Ablowich, 150 ft. from S line and 776 ft. from W line of H. D. Jewett 52-ac. tract, E. Chick Sur.	S.D. 3,733 ft.
Joiner et al's No. 1 Blackwell, 300 ft. S and 150 ft. from E lines of 276-ac. tract, Dunnetelle Sur.	S. D. 2,070 ft.

ELLIS COUNTY

Armstrong's No. 1 Milton Cook, SE cor. of 50-ac. tract, S. Frederick Sur.	S.D. 215 ft.

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Ward County Pool Extended South by Wildcat; Probable New Pool in Young County

By L. E. BREDBERG
Fort Worth Bureau, The Oil and Gas Journal

FORT WORTH, Tex., Aug. 15.—The Edwards-O'Brien and Hutchings Pool of northern Ward County has been extended another 1¼ miles farther to the south this week by a semiwildcat test drilled by Renaud & Prettyman of Fort Worth. The test, located in the northeast corner of Section 4, Block 16, University Land, topped the lime at 2,352 feet, and logged the first sand at 2,472 feet, striking the pay at 2,685-88 feet. It started flowing 3 bbls. of oil every hour by heads, but is considered as good for much better than this initial showing when it is completed and turned in the tanks. Tanks are now being erected preparatory to completion.

Gulf Production Co.'s No. 4 Hutchings is the nearest producer to the University well. No. 4 Hutchings is making mostly gas, with but little oil. Making an oil producer out of the University test will stretch the O'Brien Pool out for over 6 miles from north to south. Gulf Production Co. holds the majority of the acreage in the pool. Gulf Pipe Line Co. is taking the oil from the area, which has witnessed a gradual drilling pace.

The Plains Producing Co. and Simms Oil Co.'s No. 1 Benton Land Co. test in Section 26, Block 1, western Ward County, which is drilling for the Delaware pay horizon found in Shipley and Plains Producing Co.'s discovery 2 miles to the south, is now down below 4,750 feet drilling ahead. It topped the Delaware at 4,754 feet. These operators have made location for another test farther to the north over in Loving County, in Section 36, Block 1. This will be another interesting test, especially if the above mentioned test proves a producer and extends production farther to the north in the direction of the Wheat Pool. The location in Section 36 is between the Wheat Pool and the present test in Section 26.

Penn Oil Co.'s No. 1 York, in Section 10, Block 34, H.&T.C. Survey, in the southern part of Ward County, between the Penn-Bennett Pool and Bradford's No. 1 Hardage & Wilson producer, struck an estimated 3,000,000 feet of gas at 2,246 feet, and is appearing as a possible connecting link between those two producing areas. Tools have been lost which has necessitated a fishing job to hold up drilling in of the test. Total depth is 2,250 feet.

Western Pecos County

The Cardinal Oil Co., which recently purchased a half interest in the Phillips Petroleum Co.'s Pryor-Courtney block in western Pecos County, is now testing the 12-mile 3-inch line which it laid from the two producers in the pool to a loading rack on the Santa Fe Railroad at Fort Stockton. There are approximately 8,000 bbls. of oil in storage at the wells which will be run first. The crude is to be shipped by tank cars from Fort Stockton to McCamey where it will be delivered to the Shell Pipe Line Co. The Pool has been without an outlet since its discovery two years ago.

The McPhee Oil Co. has made location on the Joe Kerr Ranch in Section 15, Block D-5, M.K.&T. Survey. The company has lease on the following sections in this block: 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 24.

PANHANDLE

Cochran Brothers and others are spudding a wildcat test on the Atkinson Ranch in Section 26, Block 21, H.&G.N. Survey.

On August 10 the Railroad Commission held a hearing on the Panhandle gas field in general and the Henderson petition for gas stripping order in particular. E. V. Foran, employed by the commission to survey the field and return a practical plan for conserving the natural resources of the field, stated that the unit operation of the fields had been agreed upon as a permanent plan of conservation, but, although the operators were in agreement on the proper permanent plan, they would not agree on a temporary plan to be used while the details of their permanent plan were being worked out. Mr. Foran said it would probably take eight months to work out permanent plans, but Commissioner Thompson stated that the commission would not wait eight months before taking action on the case.

Operators expressed belief that any temporary plan would lead to increased drilling of wells.

Commissioner Thompson urged the committee of operators of the field to start work immediately so as to have a tangible plan ready for presentation to the commission at a meeting at Amarillo on August 29. He also stated that the commission had two alternatives to follow in event no satisfactory arrangement could be made.

"One," he said, "would be to grant the approximately 16 applications pending seeking authority to utilize gas for stripping plants, and the other would be to shut down the field entirely." He expressed belief it would speed the day of an effective agreement should either of the alternatives be followed.

In the unit plan the commission would look at the field as a whole, each person interested in the field to shart according to the size of his interest. The temporary plan as proposed would take into consideration the area that now was being effectively drained while the permanent plan would consider the entire area known to be capable of production.

Danciger Wells

Wells of the Danciger Oil & Refining Co. in the Panhandle district were to be put under proration today, following a hearing held by the commission at Pampa, and a meeting of the commission at Austin this past week. Danciger's wells have been allowed to flow at will as a result of an injunction obtained by the company and an agreement entered into by the company and the Railroad Commission in February, 1931. The supreme court recently granted a writ of error to review the case, while the State was successful in trial and civil appeals court. Curtailing the Danciger wells would allow offsets a larger share of the 53,000 bbls. per day allowable for the district.

RANGER AND WICHITA FALLS

C. J. Gibson and others have started drilling No. 1 Stevens, located on the W. J. Stevens tract 3½ miles southeast of Coleman, in the Coleman County School Land Survey No. 57, about 1,500 feet southeast of Roth and Faurot Oil & Gas Co. production on the same tract. They will drill to the Fry sand.

There were three locations staked in Callahan County, two in Coleman and four in Shackelford County in the Ranger district. Ten tests were completed in the district: Three in Callahan, two in Coleman, two in Eastland and one each in Palo Pinto, Shackelford and Parker Counties.

W. C. Chapman and others' No. 1 Parker, in Subdivision 24, Palo Pinto County School Lands, Abstract 24, southeastern Wichita County, is a new well for the extremely shallow area in this part of the county, in the old Parker County Ranch area. It logged an oil sand at 124-38 feet and from 156-58 feet and was shut down at 170 feet and shot with 50 sticks of dynamite. It is estimated good for 15 bbls. per day, producing 36 gravity black oil. Some wells, located 4 miles west of this new well, have been producing for 15 years, and continue to pump some oil every day. Location has been made for No. 2, 300 feet east of this new well, which is 1 mile from the nearest producer.

A new sand has been logged on the Waggoner "C" lease in Wilbarger County. Barkley & Meadows drilled this well, encountering the new sand at 1,109-25 feet, from which the well is pumping 49 bbls. per day. The regular pay horizon found in this area is logged from 1,700-1,800 feet, consequently considerable drilling may be expected on this lease and adjoining lease in quest of the new shallow horizon.

New Pool in Young County

Floyd Ard., Jr., and others' No. 1-E Belknap Coal Co., Section 21, north Young County, located one-half mile from production, apparently opens a new pool from sand logged at 678-80 feet. The test is estimated good for 25 to 50 bbls. per day when completed.

The Texas State Oil Co.'s No. 1 Shipley, located in the D.L.&C. Survey, west of the Fluhman Pool near Vernon in Wilbarger County, topped sand during the latter part of the week and drilled 5 feet in sand, the well making several heads and estimated good for 50 bbls. per day. Sand was topped at 1,443 feet. Two million feet of gas was encountered with the oil. The well will lead to more drilling in this area which has been dormant for a long time.

Mid-Continent Holding Corp. and others' No. 10 Burnside, which was a proposed 4,000-foot or Strawn test, drilled in southwestern Wichita County, and one of several deep tests drilled in this area as a result of the Strawn sand discovery of the Deep Oil Development Co. on the Munger Ranch, has been abandoned at a total depth of 3,118 feet. It had showings of oil at 210-20, 2,960-78 and 3,005-09 feet. Elevation of the test is 1,004 feet.

The Railroad Commission has issued an order increasing the spacing between wells in Jack County, as per request made by operators in that county some time ago. The new order requires that offsets be drilled not closer than 330 feet from property lines, and that wells in the field proper be spaced at least 660 feet apart. The previous order allowed offsets to be drilled within 150 feet and other wells within 200 feet of each other. The new regulation applies only to wells producing below 2,000 feet.

E. H. Pigg is to drill a 2,000-foot test on the Ed Foster land in the Stephen Dennison Survey, Abstract 64, Wichita County. This will be another Canyon series test for this county.

COMPLETIONS IN PANHANDLE DISTRICT

Hutchinson County

Phillips Petroleum Co.'s No. 1 Burl (old well deepened from 3,050 feet and abandoned 3,183 feet), shot 50 quarts 3,040-50 feet; No. 3 Mary Huff-Whittenburg (old well deepened from 2,954 to 3,146 feet), abandoned; No. 4 Echo Smith (old well deepened from 2,840 to 2,966 feet), dry and abandoned.

Gray County

Danciger Oil & Refining Co.'s No. 3 Williams, top pay 2,660 feet, initial production 50 bbls. per hour, total depth

Wildcat Operations in West Texas

Week Ending August 15

BORDEN COUNTY

Company, well, farm name, section and block—	Remarks—
Westyde Investment Co.'s No. 1 Looney, 990 ft. from S and E, Sec. 15, Blk. 31, Twp. 4n, T.&P. Sur.	Crooked hole 620 ft.

BREWSTER COUNTY

Brewster Oil Co.'s No. 1 fee, 2,640 ft. S and 2,598 ft. E of NW cor., Sec. 45, Blk. G-15, G.C.&S.F. Sur.	S.D. 1,935 ft.
E. L. Chapman's No. 1 Skinner, C SW SE Sec. 100, Blk. 3, G.C.&S.F. Sur.	S.D. 1,302 ft.
Joiner's No. 1 McIntire, 853 ft. from S and 2,390 ft. from E, Sec. 31, Blk. 352, W. J. Mitchell Sur.	Spudded.
Trans-Pecos Oil & Gas Co.'s No. 1 Jones, 930 ft. from N and 2,500 ft. from E of Sec. 18, Blk. G-15, G.C.& S.F. Sur.	S.D. 2,900 ft.
Van McPhail's No. 1 McIntyre, SE cor. Sec. 59, Blk. 352, 7 miles south Alpine	S.D. 1,750 ft.

CONCHO COUNTY

Beasley et al's No. 1 Waring Estate, 400 ft. from N and E, Sec. 163, T.&N.O. Sur.	S.D. 1,700 ft.
Simmons et al's No. 1 Schultz, 150 ft. from W and center N and S of E half of J. Weber Sur., Abst. 154.	Spudded and S.D.

CROCKETT COUNTY

Doleman & Moore's No. 1 Ferner, 2,135 ft. from N and 1,485 ft. from E of Sec. 36, Blk. 2, L.&G.N. Sur.	Spudded and S.D.
Stanolind Oil & Gas Co. et al's No. 1 Todd, 1,370 ft. from N and 1,320 ft. from E, Sec. 67, Blk. UV, G.C.&S.F. Sur.	Drlg. 1,662 ft.
The Texas Company's No. 1 B. B. Ingham, 330 ft. from S and 2,330 ft. from E line, Sec. 36¼, L.&G.N. Sur.	S.D. 1,200 ft.
J. D. Young Co.'s No. 1 Shannon, 330 ft. from N and W, Sec. 35, Blk. 1, G.C.&S.F. Sur.	Location.
Mid-Kansas Oil & Gas Co.'s No. 1 Hearn, 980 ft. from S and W, Sec. 271, Blk. 1-A, H.&T.C. Sur.	Drlg. 3,330 ft.

DAWSON COUNTY

Albaugh et al's No. 1 Robinson, C NW Sec. 46, Blk. M, E.L.&R.R. Sur.	Shut down.

ECTOR COUNTY

Broderick & Calvert's No. 1 Parker, 330 ft. from N and W, Sec. 15, Blk. 44, Twp. 2s, T.&P. Sur.	Drlg. 1,347 ft.
Duffey et al's No. 1 Rutledge, 990 ft. from S, 330 ft. from E, Sec. 7, Blk. B-15	Location.
L. C. Harrison et al's No. 1 Addis, 330 ft. from N and 1,320 ft. from W, Sec. 35, Blk. 43, Twp. 2s, T.&P. Sur.	Drlg. 1,185 ft.
Phillips Pet. Co.'s No. 1 Scharbauer, 990 ft. from S and 330 ft. from W Sec. 43, Blk. 44, Twp. 2s, T.&P. Sur.	Bldg. rig.
Thomas et al's No. 1 Edwards, 330 ft. from S, 2,310 ft. from E, Sec. 38, Blk. 43, Twp. 3s, T.&P. Sur.	S.D. 3,200 ft.

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2,715 feet. The Texas Company's No. 6 Faulkner (old well deepened), old total depth 2,874 feet, old potential 60 bbls., new total depth 2,935 feet, initial production 125 bbls. on pump; No. 5-B McLarty & Lester, top pay 2,665 feet, initial production 150 bbls., total depth 2,673 feet.

COMPLETIONS IN WEST TEXAS

Pecos County

Steed Production Co.'s No. 1 Monroe, top pay 462 feet, initial production 15 bbls. per day pumping, total depth 515 feet.

Upton County

Farley and others' No. 3 Lane, top pay 2,331 feet, initial production 231 bbls. pumping, total depth 2,371 feet.

Ward County

Bradford-Bentley's No. 1 Carson, top pay 2,150 feet, initial production 15 bbls., total depth 2,250 feet.

East Texas Fields

(Continued from Page 40)

hour through tapered tubing, total depth 2,700 feet.

South Rusk County

British-American Oil Co.'s No. 7 Kangerga, top sand 3,622 feet, initial production 130 bbls. per hour through open 2½-inch tubing, total depth 3,653 feet. Deep Rock Oil Co.'s No. 11 Stofall, top sand 3,603 feet, initial production 35 bbls. in 30 minutes through open 2-inch tubing, total depth 3,673 feet. Everts Drilling Co.'s No. 3-A Jessie Cole, top sand 3,701 feet, initial production 25 bbls. in 30 minutes through 1-inch tubing choke, total depth 3,703 feet. Golding and Murchinson's No. 4 C. Young, top sand 3,668 feet, initial production 120 bbls. per hour through open tubing, total depth 3,710 feet. John W. Hoosier's No. 3-B Eaton, top sand 3,717 feet, initial production 60 bbls. per hour through open 2-inch tubing, total depth 3,744 feet. H. H. Howell's No. 1 Gus Johnson, top sand 3,833 feet, initial production 50 bbls. in 30 minutes through open tubing, total depth 3,835 feet.

Humble Oil & Refining Co.'s No. 5-B A. Blackwell, top sand 3,644 feet, initial production 92 bbls. per hour through three-fourths inch tubing choke, total depth 3,649 feet; No. 13-A Plowman, location abandoned; No. 6-A R. E. L. Silvey, location abandoned; No. 8-B R. E. L. Silvey, location abandoned; No. 10-B R. E. L. Silvey, location abandoned; No. 3-B Haywood White, location abandoned; No. 3 A. Wilson, location abandoned; No. 4 C. W. Wilson, top sand 3,546 feet, initial production 45 bbls. per hour through three-fourths inch tubing choke, total depth 3,644 feet. Lucey Petroleum Co.'s No. 1-B Maxwell, top sand 3,653 feet, initial production 45 bbls. in 30 minutes through 2½-inch open tubing, total depth 3,725 feet.

Mid-Kansas Oil & Gas Co.'s No. 7 H. C. and G. W. Burton, top sand 3,635 feet, initial production 108 bbls. per hour through 2-inch lead, total depth 3,665 feet; No. 27 M. M. Cross, top sand 3,604 feet, initial production 92 bbls. per hour through tubing, total depth 3,620 feet; No. 22 W. T. Grissom, top sand 3,636 feet, initial production 108 bbls. per hour on 2-inch lead, total depth 3,641 feet; No. 23 W. T. Grissom, top sand 3,610 feet, initial production 130 bbls. per hour on 2-inch lead, total depth 3,643 feet; No. 4 D. Ledbetter, top sand 3,614 feet, initial production 55 bbls. per hour on 2-inch lead, total depth 3,610 feet; No. 9 J. F. Mason, top sand 3,629 feet, initial production 76 bbls. per hour on 2-inch lead, total depth 3,673 feet; No. 6 R. G. Mason, top sand 3,637 feet, initial production 54 bbls. per hour on 2-inch lead, total depth 3,712 feet; No. 3 T. C. Warren, top sand 3,614 feet, initial production 80 bbls. per hour on 2-inch lead, total depth 3,675 feet. Pansy Oil Co.'s No. 2 Glover, top sand 3,560 feet, initial production 30 bbls. per hour through open 2-inch tubing, total depth 3,693 feet.

Sinclair Prairie Oil Co.'s No. 34 Kinney, top sand 3,660 feet, initial production 50 bbls. in 13 minutes through open 2½-inch tubing, total depth 3,680 feet; No. 35 Ida L. Kinney, top sand 3,665 feet, initial production 45 bbls. in 15 minutes through open 2½-inch tubing, total depth 3,680 feet; No. 36 Ida L. Kinney, top sand 3,665 feet, initial production 35 bbls. in 15 minutes through open 2½-inch tubing, total depth 3,680 feet. Stanolind and Pure Oil Co.'s No. 13 W. H. Siler, top sand 3,618 feet, initial production 44 bbls. in two hours through open 2½-inch tubing, total depth 3,632 feet. Ward Oil Co.'s No. 2 F. J. Cox, top sand 3,665 feet, initial production 8 bbls. per hour through open 2-inch tubing, total depth 3,697 feet. Willard Oil Co.'s No. 3 J. R. Alford, top sand 3,603 feet, initial production 50 bbls. per hour through open 2-inch tubing, total depth 3,650 feet.

Smith County

Amalgamated Oil Co.'s No. 5 Cooke, top sand 3,712 feet, initial production 140 bbls. per hour through open tubing, total depth 3,715 feet. British American Oil Co.'s No. 3 M. L. Thompson, top sand 3,620 feet, initial production 120 bbls. per hour through open 2½-inch tubing, total depth 3,633 feet. C. B. Bunte's No. 4 I. J. Smith, location abandoned. Mid-Kansas Oil & Gas Co.'s No. 23 M. M. Cross, top sand 3,632 feet, initial production 96 bbls. per hour on 2-inch lead, total depth 3,635 feet; No. 24 M. M. Cross, top sand 3,629 feet, initial production 100 bbls. per hour on 2-inch lead, total depth 3,633 feet.

Sinclair Prairie Oil Co.'s No. 19-A Jarvis, top sand 3,696 feet, initial production 30 bbls. in one-quarter hour through open tubing, total depth 3,704 feet; No. 7 Bunch Wilson, top sand 3,730 feet, initial production 50 bbls. in one-fourth hour through open 2½-inch tubing, total depth 3,734 feet. Sun Oil Co.'s No. 4-B A. V. Ritch, top sand 3,713 feet, initial production 30 bbls. per hour through open tapered tubing, total depth 3,719 feet. The Texas Company's No. 7 Wilson, top sand 3,653 feet, initial production 81 bbls. per hour through open 2-inch tubing, total depth 3,667 feet.

Upshur County

Alma Petroleum Co.'s No. 4 Younce, top sand 3,670 feet, initial production 40 bbls. in one-fourth hour through 1-inch tubing choke, total depth 3,688 feet. Galvez Oil Co.'s No. 4 Eva Moore Heirs, top sand 3,690 feet, initial production 60 bbls. per hour through 1-inch tubing choke, total depth 3,695 feet. Mudge Oil Co.'s No. 5-A S. E. Richardson, top sand 3,710 feet, initial production 80 bbls. per hour through open 2-inch tubing, total depth 3,770 feet. Shell Petroleum Corp.'s No. 11 C. C. Landers, top sand 3,698 feet, initial production 15 bbls. in one-half hour through tapered tubing, total depth 3,722 feet. Simms and Buttram's No. 4 W. R. Nicholson, top sand 3,661 feet, initial production 60 bbls. in one-half hour through 2-inch open tubing, total depth 3,667 feet. Steen Drilling Co.'s No. 1 Lodin, top sand 3,688 feet, initial production 75 bbls. per hour through three-quarters inch tubing choke, total depth 3,720 feet; No. 3 Lodin, top sand 3,680 feet, initial production 75 bbls. per hour through three-quarters inch tubing choke, total depth 3,715 feet. Sun Oil Co.'s No. 6 J. Hargraves, top sand 3,702 feet, initial production 10 bbls. per hour through tapered tubing, total depth 3,719 feet.

WILDCAT COMPLETIONS

Cherokee County

Joiner and others' No. 1 W. H. Martin, drill stem test from 3,816-22 feet, tested 3,500 feet of salt water in one-quarter hour, top sand 3,816 feet, dry and abandoned, total depth 3,822 feet (D. Parker Survey).

Lamar County

Doyle and Jondeau's No. 1 Horn, dry and abandoned, total depth 2,958 feet.

Rains County

C. H. Bayliss' No. 1 Ownby, dry and abandoned, total depth 4,986 feet, formerly completed at 4,036 feet, top Woodbine sand 4,432 feet.

Ontario County, N. Y., Has 5,000,000 Foot Gasser From Niagara Limestone

By STAFF CORRESPONDENT

CORNING, N. Y., Aug. 13.—Interest in the New York-Pennsylvania gas field shifted in the past week from Potter County, Pennsylvania, to Ontario County, New York, where Burns & Son drilled a 5,000,000-foot gasser on the Mower farm, near Geneva. Gas was found in a sand in the Niagara limestone at 1,090 feet, 150 feet below the top of the lime. The well showed a rock pressure of 560 pounds. The test was drilled in the center of the Burns block of 10,000 acres. The gas production was somewhat of a surprise to the owners whose objective was the Clinton sand, about 400 feet below the depth at which gas was found, and the Medina sand, 200 feet below the Clinton, if the latter sand proved barren. The owners of the well will soon start another well on the same farm, which contains 200 acres.

The York-Penn Gas Co. will start drilling a test on the Peter Hart lot in Lawrence Township, Tioga County, this week. The test is located on the Sabinsville anticline on which there are several large gas wells, and the location is not far from some of these big wells.

The Empire Gas & Fuel Co., which supplies 16 towns and villages in Allegany and Steuben Counties, New York, has started construction of a pipe line from the Hebron Field in Potter County to its main system near Hornell, in Steuben County, New York.

Construction work has been begun on branch lines running from the New York State Natural Gas Co.'s main line from the Tioga Field to Syracuse. The branches will extend to Ithaca and Cortland. Only a few miles of line will be required on either extension.

The first deep test for gas in the Alfred, N. Y., sector is being drilled by C. A. Rutter and others on a location made by Paul Torrey of Bradford and Jack Gaddis of Olean, geologists. The well is below 1,200 feet, but the objective Oriskany sand is expected to be found at 4,500 feet or thereabouts. Good showings of gas were found at 450 feet and 750 feet. Alfred is in Allegany County.

The next well due for completion in the western Potter County gas region is the Potter Development Co.'s No. 1 Matteson in Hebron Township which was drilling in cap rock at 5,190 feet when last reported.

In Tioga County, Lycoming Natural Gas Co. was near Oriskany sand depth in its No. 1 Myron Finch near Elkland, Pa. The Elkland Oil & Gas Co. has started drilling No. 1 Van Deusen in Farmington Township. C. E. Updegraff has abandoned his deep test on his fee in Rutland Township at 5,592 feet.

In Potter County, which has attracted much attention to its possibilities recently through the completion of three big gas wells in Hebron Township, the Tioga Realty & Development Co. has rig up for No. 1 Coyle in Hebron Township, 6,200 feet east of No. 1 Shrack. Hammondsport Natural Gas Co. is below 500 feet in No. 1 W. L. Gale, in Allegany Township, and Morrow and McGraw's No. 1 Cole in Allegany Township is below 700 feet. These are the newest of Potter County's crop of drilling wells. The deepest test in the county, Allegany Gas Co.'s No. 1, on the Emporium Lumber Co.'s tract in the East Fork district is 5,935 feet deep and the crew is engaged in a cleaning out and cementing job.

Explain Main Features of Hydrogenation Process

(Continued from Page 11)

low temperatures and retain its "body" at high temperatures.

2. It must not become too sluggish and must be capable of being pumped at low temperatures.

3. It must not break down under high temperatures.

4. It must not leave excessive or hard to remove carbon deposits in the engine.

5. It must not be consumed too rapidly, remaining in the engine in good condition for long periods, and keeping fit to do its job until it is drained.

The difficulty up to the present, the company continues, has been to combine all five of these qualities in a single oil. Paraffin base oils, among the best known of which are the so-called Pennsylvania oils, fulfill 1, 3 and 5 (above), but then tend to form considerable quantities of hard, scaly carbon and because of difficulty in removing wax, usually have high pour points and tend to congeal under winter operating conditions.

On the other hand, naphthenic base oils from the Gulf Coast and South American fields tend to form little carbon and have low pourpoints, but are lacking in the other three characteristics. Even blending cannot perfect these oils, it is added, because it results in a product combining the bad points as well as the good points of paraffinic and naphthenic case crudes.

Hydrogenation, however, it is stated, permits the accomplishment of what no other previous refining operation has ever succeeded in doing, because it literally tears apart the molecules of the oil and reforms them in the desired proportions, thus making of hydrogenated lub oil a "tailor made" product and for the first time affording perfect lubrication. The new oil, to supplant regular priced lubs now marketed by the New Jersey company, will be sold at all stations of Standard Oil Co. of New Jersey, Standard Oil Co. of Pennsylvania, Standard Oil Co. of Louisiana, and Colonial Beacon Oil Co.

Technical Solvents

The Bayway and Baton Rouge hydrogenation plants will likewise specialize in the production of technical solvents for use in the paint and varnish industry, rubber industry, manufacture of artificial leather and a number of special uses where a combination of high solvent power and controlled evaporation rate is essential. The hydrogenated solvents, officials of the company declare, have been found to be superior to other petroleum solvents and possess characteristics superior to some of those of the coal tar products with which they will be in natural competition.

These technical solvents are expected to find an important field in the manufacture of various finishes based on synthetic resins, which feature a coating of toughness, elasticity, resistance to weathering, ease of application, and resistance to oil, gasoline, and alcohol. No adequate supply of satisfactory solvents has heretofore been available for these resins, it is stated, and the hydrogenated solvents will make possible the further exploitation of these new finishes and may assist in revolutionizing the field of protective and decorative coatings of which automobile and furniture finishes are principal factors.

In discussing what the hydrogenation process could do "if," the company says:

"The first possibility of the hydrogenation process to attract world-wide attention was its ability to convert coal and other carbonaceous materials into petroleum. As it happened, the process arrived on the scene at a time when the oil industry was drowned in a seemingly endless flood of overproduction. Not only was the market overloaded with crude, but there was plenty more in the ground. Despite the fact that the industry is still having difficulty in keeping its flow from the wells within the bounds of market demand, there is not so much oil in sight that this particular function of hydrogenation can afford to be filed away for use some time in the dim distant future.

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IS PREPARED IN THIS PLANT

The constant, healthy growth of the Tret-O-Lite Company . . . from one small factory to the present plant illustrated above . . . is proof of the Petroleum Industry's ever-increasing demand for a dependable, rapid method of reclaiming cut oil and B. S. The Tret-O-Lite Process will recover every drop of oil from crude petroleum emulsions—at an extremely low cost per barrel.

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MANUFACTURING CHEMISTS

Plants and Laboratories ST. LOUIS - DALLAS - LOS ANGELES

REPRESENTATIVES IN ALL PRINCIPAL FIELDS

OGJ 8-18 Gray

Geologists have estimated that there is not much more than 10 years' supply of crude underground in present known reserves. The industry may uncover another East Texas, or it may not. But in any case hydrogenation is here when the necessity arises, to take the world's supply of coal, lignite, and the almost unlimited reserves of shale and convert them into petroleum and its products."

Operation Flexible

Both the Bayway and Bayonne hydrogenation plants could be converted to the manufacture of ammonia, nitric acid and explosives in time of emergency. Further extension of the list of products which might be made by hydrogenation, it appears, depends not on the limitations of the process so much as on the market demand for products of hydrogenated quality, and the ability or inability of older refining processes to supply them.

Authoritative Details About Iraq Pipe Line Supplied

(Continued from Page 12)

From the description just given it will be seen that the main portion of the line runs through desert country which is to a very large extent uninhabited, and is waterless for much of the year. The desert, which for the most part lies at approximately 2,000 feet above sea level, is subject to fairly considerable extremes of heat and cold, and during part of the winter months a heavy rainfall turns the alluvial portion of the route into a quagmire. The numerous wadis to be crossed, though no great obstacle during the summer, frequently in the wet season become, in a few hours, raging torrents which are quite impassable to any form of transport.

It will be necessary, therefore, to employ several different types of transport vehicles to negotiate the country, these varying from the ordinary 30 cwt. truck up to the most elaborate type of "caterpillar" motor vehicle.

Although for much of the year the desert is in the main waterless, there are a number of wells already in existence along the route and other wells are now being drilled along both the northern and southern sections of the line. It is intended to supply the most westerly pumping station on the southern route and the railhead at Mafrak from a plentiful supply of water which is available at Azraq. Along the northern route there is a fair amount of water but some difficulty will be experienced in using it owing to its general saline properties.

This question of water will naturally have a very direct bearing upon the type of pump to be used in the various pumping stations, and, although the actual type of equipment to be installed has not yet been decided, it is more than probable, because of the scanty supplies of water (which would be insufficient for steam plant) that Diesel-driven pumps will be employed.

Pumping Stations

Of the 12 pumping stations included in the plans, the first three will be equipped with duplicate plant for the double line. The remaining stations—that is, all those on the single sections of the line—will have single pumping sets.

The positions of the pumping stations in relation to each other are, of course, dependent to a large extent upon the lay of the land; and their size and number depend upon all such interrelated factors as the designed throughput, the pumping pressure and the diameter of the line. While they must, of course, be spaced at such distances apart and be so placed as to insure the maximum efficiency of their operation, every effort is being made to place them in the most suitable positions with regard to such considerations, amongst others, as the accessibility of a water supply and airplane landing facilities. Each station will be complete in itself, with the necessary tankage for the incoming oil to provide suction for the pumps, and with workshops and bungalow accommodation for the operating staff.

The annual throughput of the double line is intended to be about 4,000,000 tons, and the pumps will work at a pressure of 500 pounds to the square inch.

The main pipe line itself will be of seamless steel tubing 12 inches in diameter, with short sections of 10-inch diameter line at points of high pressure. All joints in the line will be welded in accordance with modern practice and, in order to reduce temperature variation to the minimum, the pipe line will be buried to a depth of about 3 feet throughout its length. By burying the line it will also be rendered less liable to wanton damage.

Line 1,180 Miles

The double line will require 1,180 miles of pipe, this representing a total weight of approximately 120,000 tons. As previously mentioned the orders for the pipe have already been placed and these have been distributed among British, French, American and German manufacturers.

Modern methods of pipe line construction call for a variety of types of equipment, such as caterpillar cranes for pipe laying, power, drainage and back filling machines, air compressors, generating units for welding and so forth.

A necessary preliminary to the construction of a pipe line of such length in country so largely uninhabited, is the erection of temporary buildings to be used as offices, stores, workshops and garages and this work has already commenced. Another essential preliminary to the major work is the erection of telegraph and telephone lines along the route, and all the necessary material for 1,000 miles of overhead line has been ordered. It will interest some readers to know that the material ordered includes 25,000 steel tubular poles with cast-iron bases, and a like number of timber cross-arms., 120,000 spindles and insulators, and over 4,000 miles of cadmium copper wire, together with the necessary stays, binders and instruments. For carrying the wires across the Tigris and Euphrates, special towers 130 feet high will be erected.

Refinery Gasoline Market Reported Steadier in East

(Continued from Page 23)

and reports on Soviet exporting activities received from abroad would indicate that none is contemplated, so far as the Russian group is concerned, at least.

Petroleum Exports

Continued irregularity characterized the local export market, shipments showing slight increases on some products, although declining sharply on others, notably paraffin wax. Inquiries continued rather limited in volume, and new business did not attain important gallonage.

The following table shows exports of principal refined petroleum products from the port of New York for the past three weeks (all figures in gallons unless otherwise noted):

	Week ended		
	Aug. 6	July 30	July 23
Gasoline	75,000	60,000	95,000
Naphtha	480,000	15,000	295,000
Kerosene	40,000	23,000	28,000
Fuel and gas oil	35,000	28,000	204,000
Lubricating oil	575,000	585,000	560,000
Petroleum, ref'd.	231,000	355,000	152,000
	Pounds		
Petrolatum			8,000
Paraffin wax	210,000	1,340,000	1,015,000
Refined		115,000	160,000
Scale		75,000	64,000
Lub. grease	910,000	690,000	585,000

Imports

Imports of crude and refined petroleum at principal United States ports for the week ended August 6 totaled 573,000 bbls., a daily average of 81,857 bbls., compared with 348,000 bbls., or 49,714 bbls. per day, in the previous week and 85,036 bbs. daily for the four weeks ended AugustAugust 6. Of the week's imports, 391,000 bbls. came in at New York and 182,000 bbls. at Philadelphia, total receipts comprising 357,000 bbls. of crude and 216,000 bbls. of fuel oil.

California Oil Receipts

There was only one cargo of California petroleum received at East Coast or Gulf ports, this consisting of 70,000 bbls. of gas oil landed at New York. This was a daily average of 10,000 bbls. per day and compared with no receipts for the previous week, and 29,464 bbls. daily for the four weeks ended August 6.

East Central Texas Wildcats

(Continued from Page 40)

Armstrong Bros.' No. 1 Reeves ..... Waiting on cmt. to set 100 ft.
Armstrong Bros.' No. 1 John Lee Winn, 1,650 ft from E and 150 ft. from S of Orland, Orlo Wheeler Sur. ..... S.D. 1,435 ft.
Clark Brooks' No. 1 Anderson, SE cor. of 3,900-ac. tract, 10 miles SW of Wachatchie, E. C. Branch Sur. ..... Drlg. 585 ft.
Paris Oil Co.'s No. 1 O. S. Bain, 1,500 ft. from S line and 300 ft. from W line of 60-ac. lease, R. M. Williams Sur. ..... Location.
Worthen Petroleum Co.'s No. 2 Cerf, Mulligan Farm Sur., 50 ft. W of No. 1 ..... Prepare to abandon; T.D. 2,395 ft.

FRANKLIN COUNTY

Tom Harper's No. 1 fee, 150 ft. from N line and 200 ft. from E line of 116-ac. tr., W. M. Dawson Sur. .... Fishing 3,404 ft.

FREESTONE COUNTY

Clyde Creighton's No. 1 Holley Bros., 854 ft. from W line and center of N and S lines of lease, A.B.M. Sur. ..... S.D. 1,065 ft

GREGG COUNTY

Arkansas Fuel Oil Co.'s No. 1 J. D. Davis, 330 ft. from N line and 225 ft. from W line of lease, D. Sanches Sur. ..... Waiting on cmt. to set; T.D. 3,594 ft.
Arkansas Fuel Oil Co.'s No. 1 E. Killingsworth, 330 ft. from N and W lines of lease, William Robinson Sur. ..... Location.
Atlantic and Wadley's No. 1 Hays, 330 ft. from S line and 660 ft. from W line of lease, W. C. Alvice Sur. ..... Drlg. 700 ft.
Atlantic Oil Producing Co.'s No. 1 P. McGeorge, 330 ft. from S line and 330 ft. from W line of lease, P. McAnally Sur. ..... Top sand 3,465 ft.; T.D. 3,489 ft.
D. M. Buffington's No. 1 Dansley, 500 ft. W and 200 ft. N of NE cor. of Searight Blackman 100-ac. lease, W. P. Chisum Sur. ..... S.D. 1,700 ft.
Calaco Oil Co.'s No. 1 Wash and S. Vaultz, 300 ft. from S line and 115 ft. from E line of lease, G. F. Penn Sur. ..... Rig up.
Chapman-Thomas et al's No. 1 J. H. Gage, 290 ft. W and 170 ft. S of most easterly NE cor. of T. L. Gray lease, H. R. Hokit Sur. ..... Derrick.
J. E. Davant's No. 1 Rowland, 180 ft. W and 450 ft. S of SW cor. of Magnolia's Roland lease, M. V. Winkle Sur. ..... Drlg. 3,515 ft.
Dodd and Markey's No. 1 J. F. Holt, 615 ft. E and 707 ft. N of SW cor. of 200-ac. tract, H. Edwards Sur.... S.D. 3,025 ft.
Feazell et al's No. 1 McKinley, 430 ft. from S line and 321 ft. from W line of lease, W. M. Robinson Sur. ... S.D. 3,609 ft.
F. E. Flannery's No. 1 M. T. Cole, 330 ft. from W line and center of N and S lines of 10-ac. lease, E. M. Bramlett Sur. ..... Rig up and S.D.
Lewis Godlin's No. 1 E. L. Walker, 330 ft. N of road, 330 ft. from E line of 80.2-ac. tract, M. Dillard Sur... Derrick.
Guiberson Oil Corp.'s No. 1 C. L. Taylor, 235 ft. from N line and 290 ft. from E line of lease, W. H. Castleberry Sur. ..... Derrick.
Guinn Petroleum Co.'s No. 1 J. S. and F. Elder, 200 ft. NE of Solar's No. 1 Elder, and 450 ft. SE of Martin's No. 1 Elder, M. V. Winkle Sur. ..... Rig up.
Gulf Production Co.'s No. 1 Longley, 521 ft. from N line of lease and center of E and W lines, D. Dainwood Sur. ..... Drlg. 3,400 ft.
Humble Oil & Refining Co.'s No. 1 W. C. Shoultz, 330 ft. from N and W lines of 119-ac. lease, S. S. Davis Sur. ..... Derrick.
Hurley, trustee's No. 1 M. B. Hughey, center of Blk. No. 170, M. V. Winkle Sur. ..... Waiting on cmt. to set; T.D. 3,846 ft.
S. J. Jordan's No. 1 E. L. Walker, 660 ft. W of SE cor. of lease and 165 ft. from S line and 155 ft. from river, E. A. Lambert Sur. ..... Rig up.
Rodger Lacy's No. 1 fee, 300 ft. NW of No. 2 and 75 ft. W of road, M. V. Winkle Sur. ..... Derrick.
Magnolia Petroleum Co.'s No. 1 M. Andrews, 330 ft. from N line and 368 ft. from E line of lease, J. Blair Sur. ..... Location.
Joe Manzeil's No. 1 Victory, center of Blk. No. 13, H. R. Hokit Sur. ..... Waiting on cmt. to set 3,586 ft.
Martin Wood Oil Co.'s No. 1 Nanny E. Walker, 94 ft. from N line and 85 ft. from W line of .84-ac. lease, M. Dillard Sur. ..... Top sand 3,582 ft.; T.D. 3,586 ft.
McBride et al's No. 1 Tubbs, 330 ft. from N line and center of E and W lines of 6-ac. lease, D. Sanches Sur. ..... Derrick.
Munn et al's No. 1 I.&G.N.R.R., approximately 275 ft. SW along railroad from No. 2, M. V. Winkle Sur. ... Top sand 3,555 ft.; waiting on cmt. to set 3,571 ft.
J. B. Patty et al's No. 1 Farrell, 330 ft. S and 175 ft. W of NE cor. of E 50 acres of 148-ac. tract, D. Sanches Sur. ..... Location.
J. D. Patty et al's No. 1 J. C. McCormick, 207 ft. SE at right angles to Gladewater-Tyler road and 540 ft. SW of Abernathy and Kirkpatrick's No. 1 Grogston, M. Dillard Sur. ..... T.D. 3,617 ft.; swabbed, flowing little oil 2,200 ft.; fluid in hole.
E. A. Payne et al's No. 1 R. M. Woods, 20 ft. from S line and 81 ft. from W line of 2.13-ac. lease, H. R. Holit Sur. ..... Derrick.
E. J. Raddatz' No. 1 Sabine River, 330 ft. from W line of lease, 365 ft. NW of Sinclair's No. 2 A. A. King, State Land Sur. ..... Bldg. derrick.
J. J. Roberts' No. 1 H. S. and F. Elder, 90 ft. from SW line and 90 ft. from E line of 1-ac. lease, M. V. Winkle Sur. ..... Drlg. 1,520 ft.
Russell Petroleum Co.'s No. 1 M. T. Cole, 330 ft. from S and E lines of survey, J. A. Duncan Sur. ..... Derrick.
Snowden and McSweeney's No. 1 M. Bonner, 990 ft. from E line and center of N and S lines of 100-ac. lease, J. R. McRae Sur. ..... Waiting on cmt. to set 3,610 ft.
South Gulf Production Co.'s No. 1 Cemetery, 225 ft. NW of Barnsdall's No. 1 McGrede, on one-half acre lease, D. Sanches Sur. ..... S.D. 200 ft.
Stoddard et al's No. 1 George Anderson, S offset to Stroube and Stroube's No. 3-B Anderson, C. H. Alexander Sur. ..... Derrick.
Sun Oil Co.'s No. 1 T. J. Pressley, 330 ft. from N and W lines of lease, M. Alexander Sur. ..... Location.
Tidal Oil Co.'s No. 3 W. Christian, 250 ft. from S line and 250 ft. from W line of lease, G. W. Hooper Sur. ..... Derrick.
W. C. Turnbow, trustee's No. 1 J. N. Dixon, 330 ft. from E line of lease and 477 ft. N of Alexander and Rassmussan's No. 1 Dixon, I. Beaty Sur. ..... Derrick.
W. C. Turnbow's No. 1 Knowles, W offset to Everts' No. 2 Barton, M. V. Winkle Sur. ..... T.D. 3,585 ft.; testing
Winona Oil Co.'s No. 1 Sumi-Wells, 330 ft. from S and E lines of tract, 550 ft. from S line of survey, J. M. Morris Sur. ..... T.D. 3,730 ft.; waiting on cmt. to set.
Wyche Bros.' No. 1 Charles Arnold, 330 ft. from E line and cen. of N and S lines of 34-acre lease, Peter Holmes Sur. ..... TD. 3,712 ft.

HENDERSON COUNTY

B. L. Green et al's No. 1 M. H. Gussett, (old well drilled deeper), 150 ft. from N line and 1,000 ft. from W line of 105.5-ac. tract, 3 miles SW of Mabank, L. D. Stover Sur. ..... S.D. 3,147 ft.

H. H. Meyers' No. 1 M. E. Olson, 2 miles S of Brownsboro tract in NW cor. of survey, George Wilson Sur. ....S.D. 250 ft.

HILL COUNTY

Sherman-Houseman's No. 1 J. F. Griffith, in Samuel Waddell Sur. ....Fishing 3,356 ft.
T. J. Spikes' No. 1 M. H. Davis, 150 ft. from S and E lines of 55-ac. tract, H. R. Alexander Sur. ....Location.

HOPKINS COUNTY

Columbia Oil & Gas Co.'s No. 1 McCloud, 150 ft. from S line and 200 ft. from E line of lease, Holbrook Sur. ....Derrick.
Roark et al's No. 1 Taylor, 220 ft. from N and W lines of 80-acr. tract in the John Polk Sur. ....S.D. 540 ft.

HUNT COUNTY

Chandler et al's No. 1 Mrs. A. Walker, 200 ft. from S line and 500 ft. from W line of most southerly SW cor. of tract and survey, J. P. Bowerman Sur.... Coring 2,660 ft.

KAUFMAN COUNTY

Sandy Darnell et al's No. 1 Sally Pannill ....S.D. 2,350 ft.

LAMAR COUNTY

G. W. Davy et al's No. 1 McGustion, 450 ft. from S line, 450 ft. from W line of farm and survey, Galet Wood Sur. ....Temp. abnd. 3,605 ft.
Doyle and Jondeau's No. 1 Martin, 990 ft. from N line and 330 ft. from E line of tract, Joseph Deck Sur. ....S.D. 2,446 ft.

LEON COUNTY

Alladay et al's No. 1 W. R. Thompson, 330 ft. from N line of survey and 330 ft. from E line of 98-ac. tract, N. M. Allen Sur. ....Derrick.

MORRIS COUNTY

Leonard's (Tucker-Fullwood) No. 1 P. M. Staggers, 450 ft. from N line and 150 ft. from E line of 65.5-ac. tract, J. D. Nelson Sur. ....S.D. 3,554 ft.

NACOGDOCHES COUNTY

Adams et al's No. 1 Fuller Brothers, located in a 269-ac. tract, Jose Flores Sur. ....Location.

POLK COUNTY

Cannon et al's No. 1 Roberts, 10 miles N of Livingston, Romera Sur. ....Rig up and S. D.

RED RIVER COUNTY

Hoffman and Henson's No. 1 H. H. Lennox, 2,790 ft. W and 300 ft. S of most easterly NE cor. of survey, J. E. Edmondson Sur. ....S.D. 60 ft.
Concord Oil Co.'s No. 1 J. R. Dellahunty, 500 ft. from N of Isaac Moore Sur. and 200 ft. E of E line of Robert Glass Sur. ....Reaming 2,545 ft.
L. G. Priest's No. 1 W. C. Ware, 3½ miles SE of English, 987 ft. from most southerly S line and 150 ft. from most easterly E line of 103.2-ac. tract, James Burkham Sur. ....S.D. 2,183 ft.

ROCKWALL COUNTY

Bucanner Oil Co.'s No. 1 H. L. Lofland, center of 69-ac. tract in W. M. Bird Sur. ....Set 10-in. csg. 130 ft.

RUSK COUNTY

Acme Oil Co.'s No. 2 Andy Givens, 150 ft. from W line and center of N and S lines of 2-ac. lease, R. E. Winn Sur. ....Rig up.
Arrow Drilling Co.'s No. 1 Church Lot, center of M. E. Church Lot of London F. Cordova Sur. ....Drlg. 3,700 ft.
Brooks Petroleum Co.'s No. 1 Mayfield, Daniel Clark Sur. ....Top sand 3,622 ft.; waiting on standard rig; would not flow; T.D. 3,702 ft.
T. E. Castle's No. 1 R. H. Gary estate, 3,960 ft. from N line and 5,280 ft. from W line of survey, 10 miles S of Henderson, A. Latham Sur. ....S.D. 3,280 ft.
E. L. Chapman's No. 2 W. P. Moore, 330 ft. from S line and center of E and W lines, M. J. Pru Sur. ....Drlg. 1,200 ft.
Daisy Oil Co.'s No. 1 C. Young, 330 ft. N and 330 ft. E of SE cor. of Sun's Selman lease, M. J. Pru Sur. ....Rig up.
A. B. Edwards et al's No. 1 E. L. Pinkston, center of .63-ac. tract, M. J. Pru Sur. ....Drlg. 2,955 ft.
J. Guinn's No. 1 Neal Cooper, center of Blk. No. 36, T. J. Moore Sur. ....Waiting on standard rig; T.D. 3,660 ft.
Harris and Russell's No. 1 T. W. Harris, 330 ft. from S line and 660 ft. from W line of most southerly SW cor. of 160-ac. tract, 3 miles SW of Henderson, W. G. Davis Sur. ....Derrick.
Hart Petroleum Co.'s No. 2 J. R. Alford, center of Blk. No. 32, T. J. Moore Sur. ....Derrick.
Hasting and Dodson's No. 1 E. B. Alford, center of Blk. No. 27, T. J. Moore Sur. ....Derrick.
Hathaway et al's No. 1 Gray, J. M. McLain Sur. ....Drlg. 3,525 ft.
Helden-Rodgerson et al's No. 1 Barton and Birdwell, N offset to Reisinger et al's No. 1 Barton, W. G. Tutt Sur. ....Top sand 3,781 ft.; swabbing; T. D. 3,792 ft.
Humble Oil & Refining Co.'s No. 1 Oscar Robertson, 350 ft. from N line and 134 ft. from W line of 50-ac. lease, J. D. Clarke Sur. ....Drlg. 1,685 ft.
J. Jeagens' No. 1 Needham, 330 ft. from N line of lease and 330 ft. from NE and 400 ft. from SE of survey, J. H. Chambers Sur. ....Spudded.
T. A. Johnson's No. 1 H. B. Leverett, 200 ft. from N line and 222 ft. from W line of tract, J Lindley Sur. ....Waiting on cmt. to set.
W. C. Know's No. 1 W. D. Peterson, center of 3.75-ac. tract, Jacob Lewis Sur. ....S.D. 2,300 ft.; rig moved off.
Marr Drilling Co.'s No. 1 John Retting, 330 ft. from N line and 1,650 ft. from E line of tract, J. H. Sparks Sur. ....Drlg. 3,027 ft.
Merrick Drilling Co.'s No. 2 George Thompson, 150 ft. from S line and 216 ft. from W and E lines of 10-ac. lease, H. Hobson Sur. ....Set surface csg.
Mid-Kansas Oil & Gas Co.'s No. 1 Peter Tipps, 330 ft. from N and W lines of lease, Peter Tipps Sur. ....Derrick.
Mid-Kansas Oil & Gas Co.'s No. 1 M. A. Price, 210 ft. from N line of road and 330 ft. from W line of lease, J. B. De Cadena Sur. ....Derrick.
Overton Refining Co.'s No. 1 J. W. Key, 330 ft. from E line and center of N and S lines of 3.6-ac. tract, J. Lindley Sur. ....Location.
Pierce and Moore's No. 1 Terrell, E offset to Sun's No. 2 Barker, E. G. Sevier Sur. ....Rig up.
W. F. Reynolds' No. 1 H. Stoddard, 330 ft. from S line of road, 220 ft. from N line of lease, and 330 ft. from W line of Creek, Juan Ximenes Sur. ....Derrick.
J. C. Sandfer's No. 1 Irwin, center of 3.5-ac. tract, J. Lindley Sur. ....Washing in; T.D. 3,773 ft.
Rose Seward's No. 1 Burton, J. J. Y'Barbo Sur. ....S.D. 3,430 ft.
Snider and Spradner's No. 1 Brightwell, 650 ft. from S line and 150 ft. from W line of lease, R. W. Smith Sur. ....Rig up.
Torrance and DePrang's No. 1 Johnson, 18 ft. W and 362 ft. N of NW cor. of Stanolind's Christian tract, W. R. Cooke Sur. ....Rig up.
R. H. Vice's No. 1 Neal Cooper, 315 ft. SW along NW line of Cooper tract and 141 ft. SE at right angles, T. J. Moore Sur. ....Waiting on standard rig 3,797 ft.
Watson and Butler's No. 1 G. W. Tipps, 330 ft. from S line and 600 ft. from W line of 18-ac. lease, H. M. Smith Sur. ....S.D. 250 ft.
Paulett et al's No. 1 Ed Sparks, 350 ft. from E, 150 ft. from S of survey, L. C. Riggs Sur. ....S.D. 1,465 ft.

LET'S CONTINUE TO MOVE AHEAD

Oil wells, pipe lines, refinery, tank cars and marketing outlets are not the basis for this company's success.

The basis for success is an aggressive, loyal organization that believes thoroughly in supporting the oil industry's efforts to stabilize itself.

On this foundation we expect to continue our steady growth.

W. G. Skelly

SKELLY OIL COMPANY

TULSA SKELLY KANSAS CITY

EL DORADO, KANS.

SMITH COUNTY

Cockburn and Hooper's No. 1 Lula Jackson, 330 ft. from E line and center of N and S lines of 27.8-ac. tract, E. Daniels Sur. ..... Drlg. 3,300 ft.

Golden Eagle Oil Co.'s No. 1 T. B. Collier, 137 ft. from S line and 150 ft. from E line of lease, J. Jordan Sur. ..... Derrick.

Holden Eagle Oil Co.'s No. 1 L. S. Sartain, center of 5-ac. lease, J. Jordan Sur. ..... Derrick.

Hooper et al's No. 1 Lula Jackson, 330 ft. S and 330 ft. E of most northerly SW cor. of Monroe Shell Robinson lease, E. Daniels Sur. ..... Fishing for drill stem, T.D. 2,934 ft.

McRabie et al's No. 1 C. P. Hamilton, 330 ft. from S and E lines of 255-ac. tract, Jackson Rector Sur. .... Derrick.

Joiner et al's No. 1 C. S. Jackson ..... T.D. 4,045 ft.; cleaning out.

McMurray Bros.' No. 1 Frank Cole, 150 ft. from E line and center of N and S lines of 10.2-ac. lease, E. Daniels Sur. ..... Drlg. 3,530 ft.

Rabe et al's No. 1 Bateman, 333 ft. from S line and 375 ft. from E line of 15-ac. lease, James Jordan Sur. ..... Rig up.

Alph Tillman et al's No. 1 Jessie Cole, 137 ft. from E line and 375 ft. from N line of 32-ac. lease, center of 5-ac. lease, James Jordan Sur. ..... Waiting on cmt. to set; T.D. 3,761 ft.

Zion Oil Co.'s No. 1 J. Wilson, 219 ft. from S line and 330 ft. from E line of 10-ac. lease, James Jordan Sur. ..... Derrick.

TITUS COUNTY

Perry V. Cook's No. 1 M. C. Rogers, center of SW of Moore Sur. ..... T.D. 4,212 ft.

UPSHUR COUNTY

Burnham and Johnston's No. 1 G. T. Shelton, 160 ft. from S line of lease and N offset to E. & D.'s No. 2 Free, William King Sur. ..... Derrick.

Cranfill & Reynolds' No. 1 Laney Graves, 330 ft. from S and E lines of lease, M. Irwin Sur. ..... Drlg. 3,300 ft.

Everetts Oil Co.'s No. 4 A. J. Sanders, 330 ft. from S and W lines of lease, T. Allen Sur. ..... Derrick.

Lewis Golding's No. 1 L. T. Mackey, 1,650 ft. NE along SE line from SE cor. of NW, S. Harrell Sur. ..... Rig up.

Grover Hart's No. 1 Allen, 330 ft. from S and E lines of lease, one-half mile W of Mountain, Gonzales Sur. ..... Derrick.

Pat Hudson et al's No. 1 D. F. Smith, 330 ft. out of SE cor. of W 100 acres of the N 200 acres of the 272-ac. lease, 3 miles E and 1½ miles N of Cranfill & Reynolds' No. 1 Rash, John Denson Sur. ..... Waiting orders 3,710 ft.

Island Oil Co.'s No. 3 Bonner, center of lease, J. McRae Sur. ..... Drlg. 3,500 ft.

Lester and Duffield's No. 1 L. Graves, 189 ft. N and 330 ft. W of SW cor. of J. McRae Sur., M. Irwin Sur. ..... Drlg. 3,619 ft.

Pitts et al's No. 1 H. Davis, center of 7.5-ac. lease, W. R. Stephens Sur. ..... Temp. abnd.

John T. Robbins' No. 1 East Mt. Baptist Church, 275 ft. W of Trico's No. 1 East Mt. School Lot, William King Sur. ..... Derrick.

Scott & Ashford's No. 1 Duphrates, 772 ft. from N line and 2,805 ft. from E line of lease, Del Torres Sur. .... Derrick.

H. K. Spear's No. 1 D. Bruner, 700 ft. W and center of N and S lines of 5-ac. lease, M. Chandler Sur. .... Coring 3,763 ft.

The Texas Company's No. 1 J. Williams, 330 ft. from N and E lines of 93.34-ac. lease, Jackson Crouch Sur. ..... Waiting on cmt. to set 3,657 ft.

Turnbow's No. 1 D. C. Shelton, center of 2½-ac. tract, Wm. King Sur. ..... Derrick.

Twin Oil Co.'s No. 1 C. J. Markey, 330 ft. from S and E line of lease, J. M. Pineda Sur. ..... Derrick.

Watson's (formerly Kinsey) No. 1 D. F. Smith, 466 ft. from S line and 1,165 ft. from E line of 266-ac. tract, J. R. Davis Sur. ..... S.D. 1,856 ft.

VAN ZANDT COUNTY

Barton et al's No. 1 C. L. Hubbard, 600 ft. out of NE cor. of Hubbard 225-ac. tract, 2½ miles S of Canton, M. J. DeCadena Sur. ..... S.D. 2,405 ft.

Humble Oil & Ref. Co.'s No. 3 L. V. Freeman, 250 ft. N and E of SW cor. of lease, John Walling Sur. .... Drlg. 2,539 ft.

Kelly O. & G. Co.'s No. 1 Lemsford, center of Lemsford tract, John Conner Sur. ..... S.D. 2,300 ft.

Pure Oil Co.'s No. 5 A. W. Ellison, 710 ft. S of N line and 700 ft. W of E lines of lease, James Rose Sur. ..... Plugged and abnd.; T.D. 3,000 ft.

Pure Oil Co.'s No. 1 A. E. Ellison, 150 ft. S and E of NW cor. of lease, John Walling Sur. ..... Drlg. 944 ft.

Pure Oil Co.'s No. 4, 250 ft. S of N line and 250 ft. W of E line of lease, Mund Gross Sur. ..... Drlg. 2,296 ft.

Pure Oil Co.'s No. 14 R. L. Wells, 500 ft. W of E line and 550 ft. N of S line of lease, Mund Gross Sur. .... Drlg. 310 ft.

A. C. Rowan's No. 1 W. E. Price, 150 ft. from N line and 150 ft. from W line of 28-ac. tract, John Walling Sur. ..... Rig up.

Van Oil Association's No 1 Tankersley, 200 ft. from E and 1,000 ft. from S of farm, L. Landers Sur. ..... T.D. 2,850 ft.

WOOD COUNTY

De Canther's No. 1 N. L. McLain, 350 ft. from N line and 642 ft. from E line of tract, Sam Brooks Sur.... Drill stem test 1,882-1,904 ft.; 9 joints of mud in 15 minutes.

W. B. Saulsbury's No. 1 T. H. Peters, 600 ft. from S line and 200 ft. from E line of 320-ac. tract and survey, 4 miles E of Mineola, W. B. McNutt Sur. .... Derrick.

Talko Oil Co.'s No. 1 G. T. Ross, B. L. Smith Sur. ..... T.D. 3,500 ft.

Wood County Dev. Co.'s No. 1 Davis, approximately 150 ft. from S line of 160-ac. tract and 2¼ miles S of Kantes in Sarah McDonald Sur. ..... S.D. 2,350 ft.

Wildcat Operations in West Texas

(Continued from Page 41)

H. F. Wurts' No. 1 E. A. Ibbetson et al, 330 ft. from N and E lines of NW Sec. 16, Blk. 44, Twp. 3s, G. M. M.Br.&A. Sur. ..... S.D. 3,605 ft.

EL PASO COUNTY

Tri-State Oil Co.'s No. 1 Bobadella, 1,325 ft. from S and E lines Sur. 264, S.F. No. 7,247 ..... S.D. 2,975 ft.

FISHER COUNTY

Cranfill & Reynolds' No. 1 George, 400 ft. from N and 330 ft. from E. Sec. 200, Blk. 1, B.B.B.&C. Sur. .... Drlg. 5,975 ft.

Southern Oil Co.'s No. 1 Purdue, 990 ft. from S and E Sec. 293, Blk. D, B.B.&C. Sur. ..... Drlg. 2,010 ft.

GAINES COUNTY

McElreath et al's No. 1 Sparks, 330 ft. from N and E Sec. 397, Blk. G ..... Drlg. 2,665 ft.; show gas 3,110 ft.

GLASSCOCK COUNTY

California Co.'s No. 1 O'Byrne, 2,310 ft. from S, 1,650 ft. from E, Sec. 33, Blk. 33, Twp. 2-s, T.&P. Sur. ..... S.D. 1,510 ft.

Continental Oil Co.'s No. 2 Hart-Phillips, 660 ft. from N, 1,980 ft. from W, Sec. 24, Blk. 33, Twp. 2-s, T.&P. Sur. ..... Drlg. 1,805 ft.

B. C. Mann's No. 1 Moore, C NE, Sec. 11, Blk. 35, Twp 3s, T.&P. Sur. ..... Drlg. 722 ft.

HOWARD COUNTY

American-Maracaibo's No. 5-A Settles, 1,896 ft. from N, 1,884 ft. from W, Sec. 6, Blk. 32, T.&P. Sur. ..... S.D. 185 ft.

Amerada Pet. Corp.'s No. 5 Coffee, 2,310 ft. from N and 1,650 ft. from W, Sec. 22, Blk. 33 ..... S.D. 2,975 ft.

Amerada Pet. Corp.'s No. 4 Coffee, 1,300 ft. from N and 1,650 ft. from W, Sec. 22, Blk. 33, Twp. 2s, T.&P. Sur. ..... Plugged back to 2,274 ft.; T.D. 2,276 ft.; putting on pump.

Green O. & R. Co.'s No. 1 Denman, 990 ft. from S and 2,310 ft. from W, Sec. 14, Blk. 30, Twp. 1s, T.&P. Sur.. Spudded and S.D.

Merrick & Lamb's No. 4 Chalk, 1,650 ft. from N and 990 ft. from W, Sec. 125, Blk. 29, W.&N.W. Sur. ..... S.D. 975 ft.

Myers et al's No. 1 Denman, 2,305 ft. from S and 2,320 ft. from E Sec. 14, Blk. 30, Twp. 1s, T.&P. Sur. .... S.D. 1,030 ft.

Sinclair-Prairie Oil Co.'s No. 2 Dodge, 2,313 ft. from S and 300 ft. from W, Sec. 11, Blk. 30, Twp. 1s, T.&P. Sur. ..... T.D. 2,794 ft.; pumping.

Sinclair-Prairie Oil Co.'s No. 3 Dodge, 1,650 ft. from S and 429 ft. from W, Sec. 11, Blk. 30, Twp. 1s, T.&P... T.D. 685 ft.; underreaming pipe.

IRION COUNTY

Davis et al's No. 1 Suggs, 1,540 ft. from S and 925 ft. from W, Sec. 3,081, Blk. 28, H.&T.C. Sur. ..... Drlg. 7,665 ft.

Stanolind Oil & Gas Co.'s No. 1 Williams, 1,320 ft. from S and E of Sec. 1,196, T.T.R.R. Sur. ..... Drlg. 6,300 ft. in new hole.

JONES COUNTY

Abers et al's No. 1 Burton, 150 ft. from S and 175 ft. from E of 43.4-acre tract in G. Martinez Sur. ..... S.D. 1,005 ft.; temp. abnd.

Johnson's No. 1 Huddleston, 165 ft. from S and W of N half of N half of Sec. 29, Blk. 18, T.&P. Sur. ..... Spudded and S.D.

J. M. Johnson's No. 1 Swann, 6,150 ft. from S and 1,650 ft. from E. I. Miley Sur. ..... S.D. 2,527 ft.

Robert Oil Co.'s No. 1 Swann, 2,550 ft. from W and 2,920 ft. from S. I. Miley Sur. ..... T.D. 2,541 ft.; T.P. 2,503 ft.; on pump.

Smart & Reynolds' No. 1 Reynolds, 2,500 ft. from N and 150 ft. from W, Sec. 2, W. T. Scott Sur. No. 3.. S.D. 175 ft.

Southern Oil Co.'s No. 1 Sears, 300 ft. from S and W J. H. Grayson Sur. ..... Drlg. 2,452 ft.

C. S. Spelling et al's No. 1 Lillie, 200 ft. from N and W Sec. 4, E. Miller Sur. No. 3 ..... S.D. 1,751 ft.

Transcontinental Prod. Co.'s No. 1 Rust, 5,300 ft. N and 995 ft. W of SE cor. J. J. Hughes Sur. 656 ..... Spudded.

Ungren & Frazier's No. 2 King, 465 ft. from N, 150 ft. from E, Subd. 6, M. Bueno Sur. ..... Rigging up.

Young et al's No. 1 Harrell, 150 ft. from S and E of N half of Sec. 8, O.A.L. Sur. ..... Location.

LOVING COUNTY

Eppenauer Drlg. Co.'s No. 1 Victor, 2,310 ft. from NE and 330 ft. from SE Sec. 4, Blk. 2, W.&N.W. Sur. .... Location.

Marvin & Mahres' No. 1 Thrope, 2,310 ft. from E and 330 ft. from S, Sec. 46, Blk. 53, T.&P. Sur. ..... S.D. 810 ft.

Fair Lawn Syndicate's No. 1 Brookfield, 330 ft. from N and W, Sec. 30, Blk. 29, P.S.L. ..... Drlg. 4,520 ft.

Goldman et al's No. 1 Allen, 330 ft. from NE and NW of Sec. 99, Blk. 1, W.&N.W. Sur. ..... Drlg. 2,875 ft.

Goldman et al's No. 2 Allen, 330 ft. from NW, 2,310 ft. from SW, Sec. 90, Blk. 1, W.&N.W. Sur. ..... Material on ground.

Goldman et al's No. 1 Reagan-McElvain, 330 ft. from NE, 2,310 ft. from NW, Sec. 84, Blk. 1, W.&N.W. Sur.. Cellar.

Lewis & Siegel's No. 1 Johnson, 330 ft. from N and 1,650 ft. from W, Sec. 6, Blk. 56, Twp. 1, T.&P. Sur.. S.D. 2,230 ft.

Martin et al's No. 1 Wheat, 990 ft. from SW and SE, Sec. 83, Blk. 1, W.&N.W. Sur. ..... Rig.

Miller et al's No. 1 Ferguson, 990 ft. from NE of Sec. 44, Blk. 29 ..... Spudded and S.D.

Plains Prod. Co.'s No. 1 Benton Land, 440 ft. from NE and NW Sec. 36, Blk. 1, W.&N.W. Sur. ..... Location.

Thomas' No. 1 Wheat, 2,310 ft. from NW, 990 ft. from NE, Sec. 83, Blk. 1, W.&N.W. Sur. ..... T.D. 3,660 ft; straightreaming csg. at 3,100 ft.

Trinity Drlg. Co.'s No. 1 Wheat, 2,310 ft. from SW, 330 ft. from SE, Sec. 3, Blk. 2, W.&N.W. Sur. ..... S.D. 1,300 ft.

MENARD COUNTY

Priest's No. 1 Sorrel, 1,000 ft. from E and 200 ft. from S cor., Sec. 132, E.L.R.R. Sur. ..... S.D. 2,860 ft.

PECOS COUNTY

Adams et al's No. 1 Shearer, 1,650 ft. from SE and 330 ft. from NE Sec. 101, Blk. 10 H.&G.N. Sur. .....

Aero Gas & Royalty Co.'s No. 2 Byrne, 1,470 ft. from NW and 1,500 ft. from SW, Sec. 54, Blk. 10, H.&G.W. Sur. ..... Drlg. 650 ft. S.D. 1,100 ft.

Corvette Oil Corp.'s No. 8 H. Monroe, 1,040 ft. from E line and 150 ft. from N line of Sec. 39, G.C.&S.F. Sur., Blk. 194 ..... Location.

Hampton et al's No. 1 Byrne, 1,980 ft. from NW and 1,500 ft. from NE, Sec. 54, Blk. 10, H.&G.N. Sur. ... S.D. 1,395 ft.; T.P. 1,356 ft.

Messinger et al's No. 1 Jones, 1,200 ft. from NW, 1,290 ft. from SW, Sec. 5, Blk. 9, H.&G.N. Sur. ..... Location.

New State Oil Co.'s No. 1 Tippett, 1,349 ft. from S and 330 ft. from E, Sec. 40, Blk. 194, G.C.&S.F. Sur. ..... S.D. 1,345 ft.; running 7-in. csg.

PRESIDIO COUNTY

Sadler et al's No. 1 Bledsoe, 2,640 ft. from N and W Sec. 15, Blk. 354, G.C.&S.F. Sur. ..... S.D. 328 ft.

REAGAN COUNTY

Big Lake Oil Co.'s No. 6-C University, 1,370 ft. from ms and 1,000 ft. from E, Sec. 12, Blk. 2 ..... T.D. 8,836 ft.; flowing 4,200 bbls. oil.

Big Lake Oil Co.'s No. 7-C University, 1,570 ft. from W and 725 ft. from S, Sec. 25, Blk. 9 ..... Drlg. 7,362 ft.

Group Oil Corp.'s No. 5-B University, 2,700 ft. from S and 1,775 ft. from W, Sec. 36, Blk. 9 ..... Drlg. ahead below 5,350 ft.

REEVES COUNTY

F. McDorman et al's No. 1 Ray Roberts et al, 2,310 ft. from S and E lines of Sec. 22, Blk. 59, P.S.L. Sur. ... S.D. 1,903 ft.

Southern Star Oil Co.'s No. 1 Wright, 1,330 ft. from S and W, Sec. 58, Cassel's Sur. ..... S.D. 250 ft.

RUNNELS COUNTY

Blue Bonnett Oil Co.'s No. 1 McMillan, 1,368 ft. from N and 660 ft. from W, Sec. 22, N. Travis Sur. ..... T.D. 2,522 ft.; T.P. 2,520 ft.; flowing 80 bbls. daily.

Dutton et al's No. 1 Dean, 5,475 ft. from NE and 1,048 ft. from NW in J. Heil Sur. No. 519 ..... S.O. 3,417-20 ft.; S.D. 3,600 ft.

SCHLEICHER COUNTY

Eastland Oil Co.'s No. 1 Joe Tisdale, C Sec. 29, Blk. M, G.H.&S.A. Sur. ..... T.D. 5,410 ft.; fishing.

Wesner et al's No. 1 Nicks, 2,310 ft. from N and 2,302 ft. from E of Sec. 77, Blk. L, T.C. Sur. ..... S.D. 5,580 ft.

George Wilson's No. 1 Page, Sec. 40, Blk. L, 1,290 ft. from N, 1,670 ft. from W, G.H.&S.A. Sur. ..... S.D. 5,058 ft.

SCURRY COUNTY

G. E. Dickman et al's No. 1 F. C. Davis, 1,000 ft. N and 1,770 ft. W of SE cor. of Sec. 275, Blk. 2, E.&T.C. Sub. ..... S.D. 5,100 ft.

W. S. Guthrie's No. 1 Snyder National Bank, 330 ft. from N and 2,310 ft. from E of Sec. 115, Blk. 97, H.&T.C. Sur. ..... S.D. 2,007 ft.

Scurry County Oil Exchange's No. 1 Earnest, 2,310 ft. from N and W, Sec. 68, Blk. 3, H.&G.N. Sur. ..... Spudded and S.D.

Seifert & Dibble's No. 1 T. M. Blackburn, 2,310 ft. from N and 2,310 ft. from W line of Sec. 153, Blk. 97, H.&T.C. Sur. ..... S.D. 4,992 ft.

TAYLOR COUNTY

Dunigan et al's No. 2 Hunter, 2,287 ft. from N and 3,567 ft. from E of Sec. 27, W. R. Wills Sur. No. 122.. T.D. 1,850 ft.; set 8-in. csg.

TERRELL COUNTY

Big Bend Oil Co.'s No. 1 Bassett, C NW Sec. 155, Blk. D, M.-K.-T. Sur. ..... S.D. 2,269 ft.

Kook Pecos Trust Co.'s No. 1 Hamilton, C Sec. 6, Georgetown Ry. Sur. ..... S.D. 3,150 ft.; moved off tools.

Miller Bros.' No. 1 Allison & Burke, C NW Sec. 10, Blk. 176, T.&P. Sur. ..... S.D. 120 ft.

PRODUCTS B S&B SERVICE

Shop Talk

That Talks Back for Your Benefit

The B. S. & B. Safety Head That Saved a Separator

AFTER many months of experiment to produce a simple device that would prevent pressure vessels from blowing up, the B. S. & B. organization perfected one with ample fatigue resistance, resistance to corrosion, water-proof and of a material that would be harmless if blown up. The device also had to be simple of renewal, leak-tight when renewed, and made of a non-sparking material.

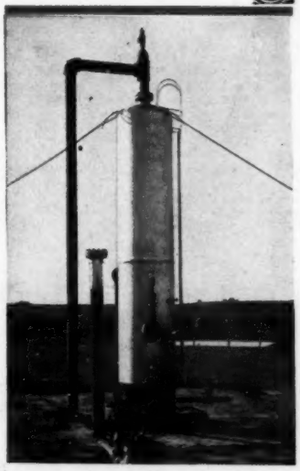
After numerous private tests, a public demonstration was held at Oklahoma City in which a pressure vessel was buried in the ground, and a B. S. & B. Safety Head was installed. When about 250 pounds of pressure were applied, the safety head blew out without any damage or danger to anyone.

The photograph above shows the B. S. & B. Safety Head in place and that on the left after it had blown out; bursting the copper safety head to small bits.

Came Through a "Baptism of Fire" with Flying Colors!

AND then came the test for the B. S. & B. Safety Head to prove its worth under actual field conditions. Unbeknowingly to anyone, this B. S. & B. Safety Head, which was applied to a separator of the Winona Oil Company at Wewoka, Okla., blew out, preventing possible loss of life and material damage to the separator. During the middle of a cold night, the line from the separator to the meter had frozen and the well pressure continued to build up, which would have made an explosion inevitable. The safety head was replaced with a spare and the separator was again in action shortly after the pumper discovered the gas roaring out of the Safety Head riser. This incident proved the B. S. & B. Safety Head to be a definite factor to safety.

The B. S. & B. Safety Head is to pressure vessels what air brakes are to trains and safety valves are to boilers.



This is the separator which was saved by the B. S. & B. Safety Head.

BLACK, SIVALLS & BRYSON INC.
OKLAHOMA CITY, OKLA.
AMERICAN TANK & EQUIPMENT CORP.
MANUFACTURING SUBSIDIARY – OKLAHOMA CITY, OKLA.

Producers of "The Weld that Held"

Mid-Kansas Oil & Gas Co.'s No. 1 Goode, 2,156 ft. from E and 330 ft. from S, Sec. 26, Blk. 161, G.C.&S.F. Sur. S.D. 6,120 ft.
Jones et al's No. 1 Pankenham, C SE NW Sec. 43, Blk. B-2, C.C.S.D.&R.G.N.G. Sur. S.D. 2,545 ft.
Sides et al's No. 1 Phelps, 2,157 ft. from N and 2,482 ft. from W, Sec. 5, G. W. Hurley Sur. Pay. 2,440 ft.

TOM GREEN COUNTY

Belding & Dutton's No. 1 Norsworthy, 1,640 ft. from S and 587 ft. from E of John McNeese Sur. S.D. 760 ft.; S.O. and gas 725 ft.
Mintex Oil Co.'s No. 1 Campbell Est., 446 ft. from S and 630 ft. from W of Sec. 180, Dist. No. 11, S.P. Sur. S.D. 1,994 ft.
Pratt & Hancock's No. 2 Lewis, 100 ft. N and 330 ft. E of most northerly SW cor. of Joshua S. Grant Sur. No. 2 S.D. 300 ft.

UPTON COUNTY

Clark-Cooper's No. 1 Lane, 2,310 ft. from N and 990 ft. from E Sec. 36, Blk. 1, M.-K.-T. Sur. Rigging up machine.
Hope Pet. Co.'s No. 3 Lane, 2,310 ft. from N, Sec. 36, Blk. 1, M.K.&T. Sur. S.D. 600 ft.
White's No. 1 Lane, 2,310 ft. from S and 990 ft. from E Sec. 36, Blk. 1, M.-K.-T. Sur. Cellar.

VAL VERDE COUNTY

Couch et al's No. 1 J. P. Yoas, 1,300 ft. from the N line and E line of Sec. 21, Blk. 1 ,L.&G.N. Sur. S.D. 400 ft.
O. O. Owens' No. 1 Mills, Sec. 128, Blk. 1, L.&G.N. Sur., elev 3,130 ft. S.D. 6,780 ft.

WARD COUNTY

Abell Bros. et al's No. 1 Smith, 330 ft. from NE and NW, Sec. 4, Blk. 34, H.&T.C. Sur. S.D. 2,265 ft.
Abell Bros.' No. 2 Smith, 2,310 ft. from SE and 2,020 ft. from NE, Sec. 4, Blk. 34, H.&T.C. Sur. S.D. 2,252 ft.
Abell Bros.' No. 3 Smith, 2,310 ft. from NE and NW, Sec. 4 T.P. 2,351 ft.; T.D. 2,412 ft.; cleaning out after shot.

Atlantic Oil Prod. Co.'s No. 2 Barrow, 1,650 ft. from NE and 330 ft. from NW Sec. 23, Blk. 5, H.&T.C. Sur. Material on ground.
Barnsdall Oil Co.'s No. 2 Henry, 990 ft. from SE and 330 ft. from NE, Sec. 28, Blk. B-29, P.S.L. Sur. Drlg. 963 ft.
Caprito et al's No. 1 Beatty, 330 ft. from SW and 990 ft. from SE, Sec. 3, Blk. 34, H.&T.C. Sur. Drlg. 910 ft.
Eastland Oil Co.'s No. 1 Green, 2,364 ft. from NW and 2,310 ft. from SW Sec. 4, Blk. 34, H.&T.C. Sur. T.D. 2,408 ft.; flowing 75 bbls. day.

Eastland Oil Co.'s No. 2 Weiss, 1,738 ft. from SW and 2,345 ft. from SE, Sec. 4, Blk. 34, H.&T.C. Sur. Location.
Eastland Oil Co.'s No. 1-A Weiss, 2,364 ft. from SE, 333 ft. from SW, Sec. 4, Blk. 34, H.&T.C. Sur. T.D. 1,905 ft.; setting csg.
Eppenauer's No. 1 Purcell, 365 ft. from SW and 1,650 ft. from SE of Sec. 17, Blk. 14, H.&T.C. Sur. T.D. 2,740 ft.
H. V. Greer's No. 1 Carr, 150 ft. from NW and 510 ft. from SW, Sec. 12, Blk. 5, H.&T.C. Sur. S.D. 2,223 ft.
Gulf Production Co.'s No. 23 O'Brien, 1,100 ft. from N and 330 ft. from E, Sec. 16, Blk. F, G.M.M.B.&A. Sur. Drlg. 2,505 ft.
Gulf Prod. Co.'s No. 12 Hutchings, 330 ft. from N, 990 ft. from W, Sec. 3, Blk. F Drlg. 1,775 ft.
Kregle et al's No. 1 Heasler, 3,062 ft. from SE, 330 ft. from NE, Sec. 46, Blk. 34, H.&T.C. Sur. Drlg. 450 ft.
Landreth Prod. Co.'s No. 1 Barker, 330 ft. from NW, 437 ft. from NE, Sec. 27, Blk. B-29, P.S.L. Sur. Spudding.
Massie et al's No. 1 Stewart, 330 ft. from SW and SE, Sec. 12, Blk. 14, H.&T.C. Cur. S.D. 2,468 ft.; cleaning out.
Maxwell's No. 1 Brillhart, 2,310 ft. from NE and SE Sec. 13, Blk. 34, H.&T.C. Sur. Location.
R. F. Owen's No. 1 Lee, 1,344 ft. from NW and 4,533 ft. from SW, Sec. 1, J. Howe Sur. S.D. 1,950 ft.
Penn Oil Co.'s No. 1 York, 2,310 ft. from NW and SW Sec. 10, Blk. 34, H.&T.C. Sur. Drlg. 2,262 ft.
Penn Oil Co.'s No. 1 Hardage-Wilson, 330 ft. from NE and SE Sec. 11, Blk. 34, H.&T.C. Sur. Material on ground.
Plains Prod. Co.' and Simms Oil Co.'s No. 1 Benton Land Co., 440 ft. from the SE and 440 ft. from SW lines of Sec. 36, W.&N.W.R.R. Sur., Blk. 1 Drlg. 4,580 ft.
Rector Oil Co.'s No. 1 Monroe, 660 ft. from NE and SE. Sec. 62, Blk. 33, H.&T.C. Sur. Drlg. 1,005 ft.
Renaud-Prettyman's No. 1 University, 330 ft. from N and E Sec. 4, Blk. 16 Drlg. 2,635 ft.
Richardson's No. 10 O'Brien, 1,897 ft. from N and 990 ft. from W Sec. 5, Blk. F Material on ground.
Rixford-Fuglarr's No. 1 London, 660 ft. NW, 330 ft. NE E cor. Sec. 10, Blk. 32, H.&T.C. Sur., but in Sec. 5 Drlg. 240 ft.
T P. Coal & Oil Co.'s No. 4 James, 330 ft. from NE and 2,365 ft. from SE, Sec. 5, Blk. 34, H.&T.C. Sur. Drlg. 2,072 ft.
Thomas et al's No. 1 Bennett, 2,310 ft. from NE and SE, Sec. 16, Blk. 34, H.&T.C. Sur. Drlg. 1,855 ft.
Weekly Oil Corp.'s No. 1 Burks, 330 ft. from SE and 1,320 ft. from SW Sec. 26, Blk. B-29, P.S.L. Sur. Material on ground.
White et al's No. 1 Burtner, 150 ft. from NE and 515 ft. from SE of Sec. 8, Blk. 32, H.&T.C. Sur. S.D. 755 ft.

WINKLER COUNTY

Sid Richardson et al's No. 1 Scarborough, 1,650 ft. from N and W, Sec. 1, Blk. 77, P.S.L. Sur. Rigging up machine.
Sid Richardson et al's No. 2 Sealy estate, 1,650 ft. from S and 330 ft. from W, Sec. 94, Blk. A, G.M.M.B.&A. Sur. Rigging up machine.

Wildcat Operations in Texas Panhandle

Week Ending August 15

CARSON COUNTY

Company, well, farm name, section and block—	Remarks:
H. A. M. Oil Co.'s No. 2 Cooper, 330 ft. from S and E, Sec. 5, Blk. 9, L&G.N. Sur.	Drlg. 1,130 ft.
Osborne's No. 1 Byrum, 330 ft. from N and E, N½ NW, Sec. 184, Blk. 3, L&G.N. Sur.	Drlg. 1,760 ft.
Skelly Oil Co.'s No. 11 East Schaffer, 440 ft. from N, 2,640 ft. from E, Sec. 189, Blk. 3, L&G.N. Sur.	T.D. 3,251 ft.; T.P. 3,140 ft.; shot; swabbing and flowing 420 bbls. in 20½ hrs.
Skelly Oil Co.'s No. 13 East Schaffer, 1,310 ft. from S, 2,100 ft. from E, Sec. 189, Blk. 3, L&G.N. Sur.	Rig on ground.
Stubblefield-Shell's No. 3 Cooper, 330 ft. from N and 330 ft. from E of SE, Sec. 5, Blk. 9, L&G.N. Sur.	Cellar.
Texoma Nat. Gas Co.'s No. 1-T, 2,640 ft from N line, 733 ft. from W line, Sec. 31, Blk. 7, L&G.N. Sur.	T.D. 2,575 ft.; set 8-in. csg.
Texoma Nat. Gas Co.'s No. 3-G Burnett, 1,342 ft. from S, 2,670 ft. from W, Sec. 162, Blk. 5, L&G.N. Sur.	Bldg. derrick.
Texoma Nat. Gas Co.'s No. 1-T Burnett, 1,324 ft. from N and E of E half, Sec. 64, Blk. 5, L&G.N. Sur.	Rigging up.

CHILDRESS COUNTY

Robertson's No. 1 Biddy, center S 26½ acres of N, Laughlin Sur. Blk. T Rig.

COLLINGSWORTH COUNTY

Cochran Bros.' No. 1 Atkinson, 660 ft. from N and E, Sec. 26, Blk. 21, H.&G.N. Sur. Spudded.
Downey et al's No. 1 Beasley, SE cor. SW SE, Sec. 95, Blk. 15, H.&G.N. Sur. Rigged up.
Kates et al's No. 1 Hickman, center NE, Sec. 42, Blk. 10, H.&G.N. Sur. Drlg. 150 ft.

COTTLE COUNTY

Darby Pet. Co. et al's No. 1 Purcell, 330 ft. from N, 1,320 ft. from E, Sec. 46, Blk. B, John H. Stevens Sur. Drlg. 2,373 ft.

DEAF SMITH COUNTY

Western Union Oil Co.'s No. 1 Farwell, C NW, Sec. 15-3n-1e S.D. 1,240 ft.

GRAY COUNTY

Back & Barber's No. 1 Back, 660 ft. from S, 330 ft. from W, Sec. 140, Blk. 25, H.&G.N. Sur. S.D. 2,428 ft.
Bell O. & G. Co.'s No. 1 Tedesco-Webb, 330 ft. from S and E, Sec. 61, Blk. 25, H.&G.N. Sur. T.D. 2,425 ft.; underreaming 8-in. csg.
Boyes et al's No. 1 Colebank-Morse, 330 ft. NE, Sec. 65, Blk. 25, H.&G.N. Sur. Drlg. 2,015 ft.
Dixon Creek Oil Co.'s No. 1 Chapman, 330 ft. from S and W, Sec. 69, Blk. 25, H.&G.N. Sur. Rigging up.
Graham-Crue Hoover's No. 1 Barrett, 330 ft. from S and W, Sec. 150, Blk. 2, L&G.N. Sur. Rig.
Granite Prod. Co.'s No. 1 Chapman, 275 ft. from N line, 110 ft. from W line, S½ SW, Sec. of Blk. 26, H. &G.N. Sur. T.D. 2,900 ft.; plugged back to 2,343 ft.; 3,500,000 ft. gas.
Gulf Prod. Co.'s No. 7 Saunders, 330 ft. from N and W, SW, Sec. 40, Blk. 3, L&G.N. Sur. Drlg. 2,742 ft.
Jewel Oil Co.'s No. 1 Meera, 330 ft. from S and W, NW SW, Sec. 106, Blk. 3, L&G.N. Sur. S.D. 2,483 ft.
Kewanee O. & G. Co.'s No. 1-C Adams, 330 ft. from S and E, Sec. 3, Blk. 26, H.&G.N. Sur. Drlg. 2,094 ft.
Kewanee O. & G. Co.'s No. 1-F Morse, 330 ft. from S and W, Sec. 3, Blk. 26 Rig.
Magnolia Pet. Co.'s No. 6 fee, 660 ft. from S and W, Sec. 14, Blk. 3, L&G.N. Sur. Rigging up rotary.
Nipper et al's No. 1 Morse, 330 ft. from N and E, Sec. 1, Blk. 26, L&G.N. Sur. Fishing 2,635 ft.
Nabob Oil Co.'s No. 1-E Morse, 330 ft. from S and W, W½ SE, Sec. 67, Blk. 25, H.&G.N. Sur. S.D. 2,950 ft.
Parton & Holt's No. 2 Morse, 330 ft. from W, 350 ft. from N, W½ SW, Sec. 5, Blk. 26, H.&G.N. Sur. T.P. 2,435 ft.; drlg. 2,512 ft.
Parton Holt's No. 3 Morse, 660 ft. from N and E of E half SW, Sec. 5, Blk. 26, H.&G.N. Sur. Fishing 1,300 ft.
Plains Drlg. Co.'s No. 1 Thut, 950 ft. from N, 330 ft. from W. Thut Sur. Cellar.
Pulse-Shell Pet. Corp.'s No. 1 Culler, 330 ft. from S and E, Sec. 173, Blk. 3, L&G.N. Sur. T.D. 3,264 ft.; T.P. 3,134 ft.
Pulse-Shell's No. 1 Brown, 330 ft. from N, 350 ft. from E of NW, Sec. 124, Blk. 3, L&G.N. Sur. Rigging up cable tools.
Richardson's No. 1 Wright, 330 ft. from S and W, Sec. 12, Blk. 3, L&G.N. Sur. Location.
Saunders et al's No. 2 Sullivan, 822 ft. from W, 231 ft. from NE, 160 ft. S, 264 ac. of N½, Sec. 136, Blk. 3, L&G.N. Sur. Will plug back to 3,275 ft. and shoot.
Skelly Oil Co.'s No. 3 Vicars, 330 ft. from S and E, Sec. 127, Blk. 3, L&G.N. Sur. Drlg. 340 ft.
Skelly Oil Co.'s No. 5 Saunders, 330 ft. from S, 928 ft. from E, Sec. 4, Blk. 1, A.C.H.&B. Sur. Drlg. 505 ft.
Sun Oil Co.'s No. 3 Combs-Worley, 450 ft. from N and 660 ft. from E of SE, Sec. 35, Blk. 3, L&G.N. Sur. Spudded.
Tarber's No. 1 Saunders, 330 ft. N and W, Sec. 3, Blk. 1, B.B.&S.F. Sur. Location.
The Texas Co.'s No. 4 Bull, 1,65 ft. from S, 330 ft. from W, Sec. 2, Blk. B-2, H.&G.N. Sur. T.D. 2,710 ft.; crooked hole.
The Texas Co.'s No. 10 Cook-Faulkner, 330 ft. from S, 1,605 ft. from W, Sec. 29, Blk. B-2, H.&G.N. Sur. Drlg. by lost tools 2,582 ft.
The Texas Co.'s No. 11 Williams, 330 ft. from N, 990 ft. from E NW, Sec. 7, Blk. 1, A.C.H.&B. Sur. Rigging up rotary.
Thorp et al's No. 1 Short, 330 ft. from N and E, Sec. 2, Blk. 1, H.&G.N. Sur. T.D. 2,340 ft.; underreaming 8-in. csg.
Trippiehorn Bros.' No. 1 Lovett, 330 ft. from N and W, Sec. 57, Blk. B-2, H.&G.N. Sur. T.D. 900 ft.; pipe stuck.
Travis et al's No. 2-B Webb, 990 ft. from S, 330 ft. from E of NW, Sec. 61, Blk. 25, H.&G.N. Sur. Rigging up standard tools.
Weltzel Oil Co.'s No. 2 Morse, 330 ft. from S and E of N half NW, Sec. 47, Blk. 25, A.&G.N. Sur. Drlg. 690 ft.

HEMPHILL COUNTY

Hoover's No. 1 Hoover, 350 ft. from N, 1,300 ft. from E, G. S. Hood Sur. To deepen old well; T.D. 5,055 ft.

HUTCHINSON COUNTY

Baso's No. 1 Moore, 330 ft. from S, 330 ft. from E, in 80 ac. in NW, Sec. 21, Blk. M-21, T.C.R.R. Sur. T.D. 3,030 ft.; estm. 5 or 10 bbls., may plug.
Danciger O. & R. Co.'s No. 1 Johnson, 330 ft. N and W, SE, Sec. 34, Blk. Y, A.&B. Sur. Spudded and S.D.
Deal O. & G. Co.'s No. 3 Sanford, 330 ft. N and E of N 80 ac., S 160 ac. Sec. 81, Blk. 46, H.&T.C. Sur. S.D. 450 ft.
Holmes & Newblock's No. 2 Moore-Langdon, 330 ft. from N and W, Sec. 125, Blk. 4, L&G.N. Sur. S.D. for repairs 2,947 ft.
Huber Pet. Co.'s No. 1-A Weatherly, 330 ft. from N and W, Sec. 26, Blk. Y, A.&B. Sur. T.P. 2,980 ft.; S.D. 3,132 ft.; 3,500,000 ft. gas.
Huber Pet. Co.'s No. 2 Christian, 330 ft. from S and E, SW, Sec. 33, Blk. Y, A.&B. Sur. Rigging up cable tools.
Huber Pet. Co.'s No. 1 Moyer-Johnson, 990 ft. from N, 330 ft. from E half SW, Sec. 34, Blk. Y, A.&B. Sur. Rig.
Liner Drlg. Co.'s No. 1-D Johnson, 330 ft. from N and E, Sec. 6, Blk. 1, B.&B. Sur. Plugged back to 3,146 ft.; S.D.
Oates & Morrow's No. 2 Starnes, 1,400 ft. from S, 630 ft. from E, Sec. 24, Blk. M-23, T.C.R.R. Sur. Drlg. 540 ft.
Pharis Oil Co.'s No. 5 Smith, 660 ft. from N and W, SW, Sec. 14, Blk. Y, M.&C. Sur. Shut down.
Steckol Prod. Co.'s No. 3-D Whittenburg, 330 ft. from S and 990 ft. from W, Sec. 38, Blk. M-23, T.C.R.R. Drlg. 2,170 ft.
Timms-Deatch's No. 4 Moore, 330 ft. N and W, Sec. 124, Blk. 4, L&G.N. Sur. Rigging up standard tools.

LIPSCOMB COUNTY

Okla. Public Service Co.'s No. 1 C. W. Jones, NE SW, Sec. 100, H.&T.C. Sur. T.D. 5,003 ft.

MOORE COUNTY

Dogie Oil Co.'s No. 1 Greenwald, 330 ft. from N and W, Sec. 277, Blk. 44, H.&T.C. Sur. Drlg. 470 ft.
Interstate's No. 1 Nield, C NE, Sec. 18, Blk. 44, H.&T. C. Sur. Rig up.
Pollard et al's No. 1 Hall, 330 ft. S and E, NE, Sec. 131, Blk. 3-T, T.&N.O. Sur. Rig on ground.
Shamrock Oil & Gas Co.'s No. 2 Brumley, 330 ft. from N and W, Sec. 360, Blk. 44, H.&T.C. Sur. T.D. 3,163 ft.; drill pipe stuck.
Shamrock Oil & Gas Co.'s No. 1 Burnett, 660 ft. from S, 330 ft. from W, Sec. 359, Blk. 44, H.&T.C. Sur. Rig.
Sunray Oil Co.'s No. 2 Jones, 330 ft. N and W, W½ SW, Sec. 164, Blk. 2-T, T.&N.O. Sur. Rig.

MOTLEY COUNTY

Matador Oil Corp.'s No. 1 Owens, C NE, Sec. 10, Blk. G, B.&B. Sur. S.D. 530 ft.

OLDHAM COUNTY

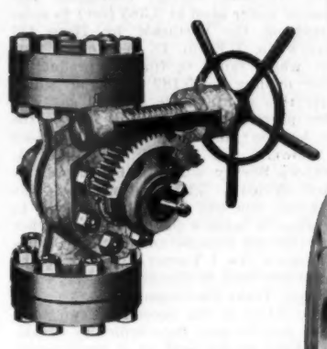
Amalgamated German-American Oil Corp.'s No. 1 Norton, 330 ft. S and E, Sec. 12, T.&N.O. Sur. S.D. 400 ft.
Chambers et al's No. 1 Herring, CNL, Sec. 20, Blk. S, G.C.&S.F. Sur. T.D. 4,000 ft.; fishing pipe.

ROBERTS COUNTY

Chicken Creek Oil Co.'s No. 1 Ledrick, 330 ft. N and W, Sec. 55, Blk. C, G.&M. Sur. Drlg. 5,005 ft.
Travis et al's No. 1 Cunningham, 330 ft. S and W, Sec. 74, Blk. M-2, H.&G.N. Sur. S.D. 2,890 ft.

WHEELER COUNTY

Devore & Robinson's No. 1 Sitter, 2,310 ft. from S and E, E½, Sec. 33, Blk. 24, H.&G.N. Sur. T.D. 2,760 ft.; S.D. for pipe line connection.
Piney Oil & Gas Co.'s No. 4 Thompson, 330 ft. from S and E of E half SW, Sec. 42, Blk. 24, H.&G.N. Sur. Rigging up cable tools.



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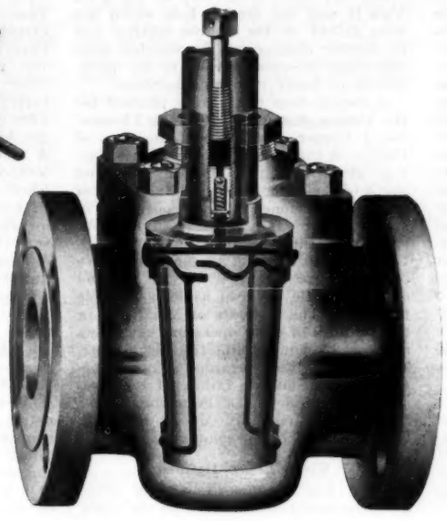

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New Field in Keeran District, Victoria County; Conroe Area Continues to Hold Interest

By NEIL WILLIAMS
Staff Correspondent, Gulf Coast Fields

HOUSTON, Tex., Aug. 15.—The Keeran district of southeastern Victoria County, in the lower Gulf Coast country, was definitely proved as an oil field the past week with the completion of Bunte and associates and Gulf Productioin Co.'s No. 2 Keeran Ranch, Martin DeLeon Survey, flowing 1,000 bbls. of pipe line oil daily. Production of the well is from a sand at a total depth of 5,831 feet where 10 feet of 4½-inch screen was set. The initial flow was through a one-half inch choke with working pressure of 425 pounds. Shut in pressure is 875 pounds. The oil is 33.3 gravity.

Location of this well is just 200 feet east of the first well drilled by these operators, which was completed last January in a sand at a total depth of 5,191 feet making an estimated 40,000,000 feet of wet gas with a pressure of more than 2,000 pounds. The second well, which is in a lower horizon, passed up the shallower sand in No. 1 in search of deeper oil production. The first well, while making some light gravity distillate, is rated only as a gas well.

These wells are on a 5,000-acre block all on the Keeran ranch, a large holding in that part of the county, which originally was obtained by the Gulf Production Co. The latter company "farmed" out 2,500 acres to Bunte and associates for the first well, later taking back 500 acres in exchange for funds provided the operators complete the first well. After the completion of the first well, the acreage was pooled with the Gulf and Bunte and associates holding undivided interests in the entire 5,000 acres.

This area is from 15 to 20 miles east of what is known as the McFaddin district in the southwestern part of the county and extending across into northern Refugio County, where two oil wells (one in Victoria County and the other in Refugio County) and a half dozen gas wells from various sands have been completed. The Bunte well is the second oil producer in the county, production so far being confined to this district and the McFaddin area.

On the same ranch but 2 miles northeast of the Bunte wells, Cullen & West have abandoned their No. 1 Keeran Ranch, this hole having been dry down to 6,606 feet, where it now is in salt water sand. The latter is on a 2,000-acre block. One other test, located on a block some distance to the south although on the same ranch and in the same survey, is drilling, this being Union Oil Co. of Nevada's No. 1 Keeran Ranch, which at latest report was in sand and shale at 5,295 feet. It so far has failed to find any showings.

Conroe Field

While the Keeran ranch well proved a new coastal field, the Conroe Field of Montgomery County held the center of interest with developments the past week and those expected the coming week playing an important part in determining the extent and trends of the producing area. Another edge marker for the present producing horizon apparently was established when Strake Oil Corp.'s No. 3 South Texas Development Co. on the west tested salt water in a drill stem test at approximately 5,200 feet. The hole is being drilled deeper and at latest report was below 5,525 feet with 6,000 feet as its goal. This is now the deepest hole which has been drilled in the Conroe district and its further drilling will be watched with particular interest in view of the possibilities of lower producing horizons.

A second deep test also is planned for the Conroe district in Rowe & Flowers' No. 1 Varner, just south of the town of Conroe in the upper Ransom House Survey, about 3½ miles to the west and north of the field. This well was reported as being abandoned by those operators in a salt water sand at 5,247-55 feet but since then through the efforts of T. P. Lee, Houston oil man, arrangements have been made to set up a heavier rig and carry the hole as deep as it is possible to drill it. The interests of Mr. Rowe in the holdings of these operators have been acquired by new capital from Oklahoma. This test had been regarded as an important key well and its failure at the present depth condemns a large amount of territory and virtually cuts the town of Conroe out of the development.

Field Being Defined

As it now stands, the Conroe Field has been pretty well defined on the north by Heep Oil Corp.'s No. 1 Roberts, William Harrison Survey, abandoned last June in water sand at 5,385 feet; to some extent on the northeast by Heep Oil Corp.'s No. 1 Brent, D. W. Collins Survey, which failed to find oil production after drilling to 5,182 feet and which early this month made a small gas well after plugging back to 5,010 feet to the gas horizon; also to the north by Rowe & Flowers' No. 1 Alexander, upper A. McCown Survey, which, although not finished, drilled to 5,254 feet where it was in water and has been plugged back in an effort to make a small well in a higher sand; on the extreme northwest by Rowe & Flowers' No. 1 Varner, and now on the immediate west by Strake Oil Corp.'s No. 3 South Texas Development Co.

The latter is the second of two tests which were to have been drilled by Strake Oil Corp. as its part of a development program undertaken by this company and the Humble Oil & Refining Co. on the 4,368-acre block of acreage taken under option by the latter company several months ago. The first of the two wells, No. 2 South Texas Development Co., was completed as a 1,200-bbl. producer in sand at a total depth of 5,026 feet. It was located 2,400 feet south of the discovery well, G. W. Strake's No. 1, which was completed in the gas horizon at a total depth of 4,991 feet. The salt water well is approximately a mile to the west and some south of No. 2, the oil producer. It is approximately 1,000 feet to the north of Heep Oil Corp.'s No. 1 Hamman, completed several weeks ago as a producer at a total depth of 5,129 feet. The latter, while it made an important extension, ran a little low and indicated a decided dipping off to the edge in that direction.

With markers on the north, northwest, west and to some extent on the southwest, the field is left open to the south, southeast and some to the east with the picture apparently shaping itself in a northwesterly-southeasterly structural condition with some faulting. That the big play may lie still farther to the southeast has been indicated by Humble Oil & Refining Co.'s No. 1 Dobbins, which, approximately 2 miles to the southeast of present production, topped the Hockleyensis marker at 3,755 feet subsea, which is 100 feet higher structurally (not considering its down dip location) than any of the other wells, and now this well is believed to be in the sand around 4,800 feet. Moore and associates' No. 1 Bruton, I.&G.N. Survey, east of the Strake wells and north of the Dobbins well, also has encountered the sand high at 4,983-5,018 feet, on which sand it now is setting casing to test. On the strength of the Humble's Dobbins well and likely good production to the southeast, The Texas Company has made location and now has a rig up for its No. 1 Moody, also in the Ransom House Survey but more than a half mile to the southeast.

A number of other wells are now on or near the producing horizon and some interesting developments as to the nature of the field should be expected within the next week.

Production Limit

An order issued August 4 by the Railroad Commission has placed a new production limit for Conroe wells. The order permits a daily flow of 40 bbls. per well with an additional 9 bbls. for each acre of the lease on which the well is located. Considering the 20-acre spacing restriction, no well would be permitted to produce more than 220 bbls. daily. This is the first production restriction placed on the field by the State Railroad Commission. Humble Oil & Refining Co. several weeks ago placed a restriction on its purchases, limiting such purchases to 10 bbls. daily per acre with a 400-bbl. set maximum for any one well. With one well to 20 acres that restriction allowed only 200 bbls. per well.

As this is written, Houston Oil Co. and Republic Production Co.'s No. 1 Ariola fee, first test drilled on the Ariola geophysical prospect in southwestern Hardin County, and which encountered a favorable oil sand at 3,264-86 feet with promise of opening an entirely new coastal field, has not been tested. The cement plug at 3,259 feet, however, at latest report, was being drilled out preparatory to the setting of screen. The block on which the wildcat is located and which has been owned jointly by the two companies, has been divided with each company holding separate leases. As a result of this, Houston Oil Co. already has staked three new locations, offsetting the joint well.

Brazoria Prospect

Another old geophysical prospect, so far undrilled, is to receive immediate development with the rigging up by Dan-

(Continued on Page 63)

Gulf Coast Fields and Wildcats

Week Ending August 13

RACCOON BEND—AUSTIN COUNTY

Company, farm and location—	Remarks:
Grant & Baker's No. 1 Chesley, W. C. White Sur., 150 ft. from NW line and 150 ft. from SW line of 26-acre tract	Sandy shale 3,042 ft.; S.D.

WEST COLUMBIA—BRAZORIA COUNTY

The Texas Company's No. 7 Abrams (W.O.), George Tennilie Sur.	T.D. 3,131 ft.; rebuilding derrick to work over.

BARBERS HILL—CHAMBERS COUNTY

R. E. Ferrell's No. 2 Wilburn, Henry Griffith League, 215 ft. W of No. 1 in center of 45-acre tract	T.D. 3,000 ft. in shale; fishing.
Humble Oil & Ref. Co.'s No. 1 Kirby, Henry Griffith League, 530 ft. N along E line from SE cor. of tract, thence 75 ft. W at right angles, thence 75 ft. N at right angles	Location.
Mills Bennett Prod. Co.'s No. 1-B Barber (W.O.), Henry Griffith League	Coring sand showing oil 5,616 ft.
Mills Bennett Prod. Co.'s No. 4-A E. W. Barber, Henry Griffith League, 300 ft. W of No. 3-A, 50 ft. N of S line	Drlg. shale and lime 5,078 ft.
Mills Bennett Prod. Co.'s No. 4 Kirby, Henry Griffith League, 200 ft. W of No. 3	Cmtd. 15-in. (O.D.) csg. 37 ft.
McAlbert Oil Co.'s No. 4 Wilburn (D.D.), Henry Griffith League	Sand 4,946-66 ft.; set 27 ft. 5-in. screen; comp. flowing 200 bbls. fluid, 40 per cent water.
Rio Bravo Oil Co.'s No. 3 Fisher, Wm. Bloodgood Sur., 300 ft. E and 33 ft. S of NW cor. of tract	Drlg. anhydrite 5,774 ft.
Sun Oil Co.'s No. 3 Higgins, Wm. Hodges Sur., 50 ft. from E line of tr. and direct offset McAlbert Oil Co.'s No. 2-B Higgins	Rock 2,442 ft.; losing returns.
Sun Oil Co.'s No. 3 Smith (W.O.), W. D. Smith Sur.	5,618 ft.; cmtd. 5-in. liner 5,425 ft.
The Texas Company's No. 7 Wilburn (D.D.), Henry Griffith League	T.D. 4,422 ft.; sidetracked 4,395-4,402 ft.; drill stem stuck.
Texas Gulf Prod. Co.'s No. 3-C Kirby, 562 ft. from W line, 50 ft. from S line of "C" lease	Rock 1,202 ft.; cmtd. 13⅜-in. liner.
Texas Gulf Prod. Co.'s No. 4-C Kirby, Henry Griffith League, 388 ft. from W line and 50 ft. from S line of "C" lease	Derrick.
Texas Gulf Prod. Co.'s No. 10-H Kirby, Henry Griffith League, 30 ft. W of No. 3 Ilfrey	Drlg. shale and lime 4,403 ft.
Texas Gulf Prod. Co.'s No. 11-A Kirby, Henry Griffith League, 1,000 ft. from W line and 225 ft. from S line of "A" lease	Drlg. sand and shale 1,012 ft.
Texas Gulf Prod. Co.'s No. 2 T. H. McLean, Henry Griffith League, 711 ft. from E line midway between C. Barber and McLean tracts on separating line	Rigging up.
Texas Gulf Prod. Co.'s No. 11-H Kirby, Henry Griffith League, 150 ft. W of No. 10-H	T.D. 2,163 ft. in salt; plugged to 1,166 ft. to straighten hole; reaming 2,008 ft.
Texas Gulf Prod. Co.'s No. 2 O. K. Winfrey, W. D. Smith Sur., 295 ft. N of SW cor. of A. E. Barber lease and 100 ft. W of E line of Winfrey lease	Derrick.
Yount Lee Oil Co.'s No. 4-A Zadie Fisher, Wm. Bloodgood Sur., 301 ft. from W line and 96 ft. from S line of tract	Drlg. gumbo 1,135 ft.

LOST LAKE—CHAMBERS COUNTY

Pure Oil Co.'s No. 16 Mayes, E. H. R. Wallis Sur., 1,825 ft. N and 1,429 ft. E of No. 1 Lost River	Building derrick.

RABBS RIDGE—FORT BEND COUNTY

Gulf Prod. Co. and Humble O. & R. Co.'s No. 2-A F. I. Booth (second hole), Samuel Kennedy Sur., 75 ft. S of No. 2-A (first hole)	Drlg. hard sandy lime 4,462 ft.

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Question of New Potentials in Ritz-Canton Pool, Kansas, Left to State Oil Advisory Board

By W. A. SPINNEY
Staff Correspondent, Kansas Fields

The daily average crude oil production of Kansas for the week ending August 13 was approximately 92,750 bbls., a decline of almost 800 bbls. per day from the previous week. The State has a potential of more than double this quantity. No decision was made on the taking of new potentials in the Ritz-Canton Pool in McPherson County at the meeting of the Kansas Public Service Commission on Friday.

Slick, Pryor & Lockhart's wildcat well in Section 7-17-10w, Ellsworth County, the largest Kansas City lime producer on the Ellsworth-Barton Arch, was drilling deeper. The well, south of the discovery well in the Ploog area of Rice County, was found to be dry in the Siliceous lime. Potential production of the areas in the central western part of the State continue to increase. Crude oil nominations were unchanged in the Ritz-Canton Field in McPherson County.

No Decision on Potentials

The Kansas Public Service Commission after a hearing August 12, in Wichita, to consider the taking of new potentials in all the prorated areas in the State, announced that no decision had been made. The taking of potential gauges in the Ritz-Canton Pool, in McPherson County, was referred to the State Oil Advisory Board. This board will decide whether potentials will be taken in that field. Marvin Lee was named chairman of the oil advisory board.

Because the expense falls on the producers a majority of the operators opposed taking of new potentials. Shell Petroleum Corp., which is the owner of a large number of royalty interests in the field, favored a new production test and a representative of Skelly Oil Co. said that his company would support such an order, if there was any question that the present potentials form an unfair basis of division of royalty oil.

Marvin Lee said that if the advisory board was asked to supervise the taking of new potentials, he would insist that a map of all the pipe lines in the field be maue and placed in the hands of the state authorities. There have been several complaints of unfair methods in taking potentials in the past. One operator said that the taking of potentials would cost him $500.

The commission also heard the testimony in support of the complaint made by the Phillips Petroleum Co. that the ratable taking law in the State was being violated in the Hollow Pool, in Harvey County. The complaint was withdrawn before any decision was reached.

Development Activity

Shell Petroleum Corp.'s No. 4 Johnson, NE cor. NW, Section 2-20-3w, in the Johnson Pool, McPherson County, has cemented the 8-inch casing in chat at 3,002 feet. The top of the chat was found at 2,962 feet, and the well was drilled to its present depth with rotary tools. This test offsets The Texas Company's No. 1 Tipton, which made 1,000 bbls. a day.

Slick, Pryor & Lockhart's No. 1, C SW NW, Section 7-17-10w, Ellsworth County wildcat, was drilled deeper from the old total depth of 3,155 feet, to a pay at 3,262-67 feet, where it made 30 bbls. of oil in three hours. Six-inch casing was landed at 3,214 feet and at 3,220-25 feet fluid rose 1,500 feet in the hole in three hours. It was drilling deeper on the last report at 3,249 feet.

New locations in the Hollow Pool, in Harvey County, were Phillips Petroleum Co.'s No. 1 in the NW cor. SW SW, Section 20-22-3w, two locations south of No. 1 Friesen, of W. C. McBride, Inc. Material is being moved to W. C. McBride, Inc.'s No. 2 Friesen, located 200 feet from the north line and 10 feet from the west line of the NW SW, Section 20-22-3w. This test is the east offset to the Frank Hollow's No. 1 School Land test, in Section 19-22-3w.

L. A. Mylius and others' No. 1 C SE SW, Section 16-21-3w, found the top of chat 55 feet higher than in a nearby producing well. It is located in the south extension to the Voshell Pool, in McPherson County. The test is rigging up standard tools.

Two gas wells in the Decker gas field in McPherson County producing from chat are to be drilled deeper. Derby Oil Co.'s No. 1 in the C SE SW SW, Section 2-19-2w, and No. 1 in the NE cor. NW, Section 14-19-2w. Both of these wells have been producing gas for more than a year and a half.

Big Well in Ritz-Canton

The Vernon Oil & Gas Co.'s No. 3 Drum, SW cor. NE, Section 35-19-2w, in the Ritz-Canton Pool, McPherson County, found the chat at 2,916-55 feet where it made 3,888 bbls. in 24 hours. It is the north offset to the recently completed Dickey Oil Co.'s No. 4 Decker, the largest well ever completed in the field, making 14,326 bbls. in 24 hours. Casing was landed at the No. 3 Drum, and cemented last week.

Potential Increases

The potential production of the central western areas of the State continue to show an increase each month. The potential on July 1 was 45,688 bbls. a day from 38 wells. It has increased to 49,616 bbls. daily from 46 wells on August 1. There has been no change in the pipe line nominations of the purchasing companies in the area and operators will continue to produce on the old basis until further notice.

The following table shows the companies with production, the wells and their potential production in the area:

Company and well—	Potential
Barton County	
Sin. Pra., No. 1 Davidson	150
Derby, No. 1 Berscheidt	50
Hilligoss, No. 1 Isern	1,023
Midwest, No. 29 Scheufler	700
Ellsworth County	
Slick et al, No. 1 Helken	1,182
Slick et al, No. 1 C. Helken	1,200
Derby, No. 1 Stoltenberg	1,880
Gypsy, No. 1 Kozisek	800
Gypsy, No. 1 Stoltenberg	1,596
Gypsy, No. 2 Stoltenberg	200
Vickers, No. 1 Stoltenberg	800
Allison et al, No. 1 Stratman	200
Aylward et al, No. 1 Stratman	2,492
Aylward et al, No. 2 Stratman	1,918
Aylward et al, No. 3 Stratman	1,082
Aylward et al, No. 4 Stratman	2,394
Aylward et al, No. 5 Stratman	2,198
Derby, No. 1 Stratman	974
Robertson et al, No. 1 Stratman	1,717
Robertson et al, No. 2 Stratman	1,970
Sin. Pra., No. 1 Stratman	128
Smith et al, No. 1 Stratman	1,734
Rice County	
Muth Bros., No. 1 Beyer	250
Slick et al, No. 1 Orth	1,800
Shell et al, No. 1 Ploog	2,000
Phillips, No. 1 Mezger	1,377
Phillips, No. 2 Mezger	1,247
Prod. & Ref., No. 1 Thompson	689
Prod. & Ref., No. 2 Thompson	1,620
Slick et al, No. 1 Mezger	1,368
Slick et al, No. 1 Schurr	742
Slick et al, No. 2 Schurr	1,062
Slick et al, No. 3 Schurr	1,540
Texas, No. 1 West	998
Vickers, No. 1 Binger	1,380
Vickers, No. 2 Binger	347
Vickers, No. 3 Binger	100
Empire, No. 1 Heckel	816
Marileen et al, No. 1 Sharpe	170
Wesbros Dev., No. 1 Macmore	1,104
Gypsy, No. 1 Steckel	150
Rush County	
Boyle et al, No. 1 Greenawalt	50
Stafford County	
Midwest, No. 29 Allen	1,800
Midwest, No. 6 Brock	800
Midwest, No. 11 Figger	500
Midwest, No. 36 Richardson	1,800
Total	49,616

Dry Hole in Ploog Area

The future possibilities of the Ploog area in Rice County, in central western Kansas, were dimmed during the week when the Shell Petroleum Corp. and others' No. 1 Murphy, C NW NE, Section 4-19-9w, the second well to be drilled in the area, found only a showing of oil and water in the Siliceous lime at 3,269-72 feet. The well is now shut down for orders and may be abandoned. The well is a 40-acre south offset to the same operators discovery well, No. 1 Ploog, C SW SE, Section 33-18-9w, Rice County, which was completed in August, 1930. The discovery well made 712 bbls. of oil in four hours from the Siliceous lime at 3,251-53 feet. It was shut down for some time and was recently opened and is being produced.

Carter Oil Co. and others' No. 1 Ploog, in Section 33-18-9w, Rice County, which was completed some time ago for 3,000 bbls. a day, is now producing cut oil and has been shut down to install a treating plant. The well found its production in Siliceous lime at 3,252-53 feet.

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Wildcat Operations in Kansas

(Descriptions are East unless marked otherwise)

Company, farm and location—	Remarks:
BARTON COUNTY	
Smith et al's No. 1 Wilson, C NW SW Sec. 13-18-14w	Rig.
Midwest Ref. Co.'s No. 7 Scheufler, C SW SE Sec. 9-20-11w	Drlg. 3,305-24 ft.; swabbed 27 bbls. an hr. for 18 hrs.; comp.
Skelton Oil Co.'s No. 1 Ott, C SE SE Sec. 16-19-14w	Set liner 3,530-46 ft.; show oil; C.O. 3,604 ft.
BUTLER COUNTY	
Cameron-Great Basin Oil Co.'s No. 1 Lardson, C SE NW Sec. 13-28-2	Drlg. 2,010 ft.
Ramsey's No. 1 Michael, SW NW NW Sec. 16-27-3	S.D. 1,985 ft.
CHASE COUNTY	
Ryan et al's No. 1 Lipp, C SE Sec. 35-18-6	S.D. 625 ft.
DOUGLASS COUNTY	
Pure Oil Co.'s No. 1 Limb, NW SE Sec. 31-14-19	S.D. 250 ft.
EDWARDS COUNTY	
Mid-Kansas O. & G. Co.'s No. 1 Converse, SW NE NE Sec. 30-24-18w	U.R. 8-in. csg. 4,220 ft., wtr.
ELLSWORTH COUNTY	
Gurley Bros. and Barnsdall's No. 1 Union Pacific, NW SW Sec. 7-14-7w	Rig.
Phillips Pet. Co.'s No. 1 Hochman, NE NW SE Section 17-16-7w	Location.
Morgan's No. 1 Andrews, NE SW Sec. 3-17-3w	Spudded; S.D.
Walker et al's No. 1 Remley, SW SE NE Sec. 23-14-7w	Drlg. 1,965 ft.
Slick et al's No. 1 Dreford, SW NW Sec. 7-17-10w	Drlg. 3,140-55 ft.; swabbing 5 bbls. per hr.
R. Gear et al's No. 1 Kroboth, SE NW Sec. 12-15-10w	S.D. 50 ft.
R. Gear et al's No. 1 Sanberth, C SW SE Sec. 29-16-9w	Drlg. 1,565 ft.
GRAHAM COUNTY	
Schleimeyer et al's No. 1 Smith, SE Sec. 24-8-25w	Rig.
HARVEY COUNTY	
Liggett et al's No. 1 Davis, SW SE NE Sec. 7-24-1	S.D. 3,105 ft.
Herndon, Blair, Deep Rock, No. 1 Santa Fe, C NW Sec. 19-23-1	Rig.
HASKELL COUNTY	
Victor Martin et al's No. 1 Martin, C NW Sec. 8-28-31w	Rig.
FINNEY COUNTY	
National Ref. Co.'s No. 1 Wells, C SW Sec. 13-23-30w	Drlg. 5,480 ft.
FORD COUNTY	
Swain et al's No. 1 Henthorn, C NW Sec. 21-25-24w	S.D. 5,205 ft.
KINGMAN COUNTY	
Panhandle Drlg. Co.'s No. 1 Wetheral, C SE NW SW, Sec. 20-28-10w	Set 12-in. csg. 1,610 ft.; S.D.
McPHERSON COUNTY	
Snyder et al's No. 1 Carlson, SE cor. Sec. 4-19-3w	S.D. 1,525 ft.
Detrick's No. 1 Dalke, NW SE Sec. 16-19-1	Drlg. 1,840 ft.
Sidwell et al's No. 1 Nichols, NE NW NW Sec. 28-17-1n	S.D. 580 ft.
Simmons-Canary's No. 1 Krehbiel, SE NW Sec. 33-18-1w	Drlg. 3,461 ft.
MORTON COUNTY	
Hydraulic Oil Co.'s No. 1 State Land, NW SE Sec. 22, 34-43w	T.D. 3,640 ft.; temp. abd.
MORRIS COUNTY	
Urschel et al's No. 1 Bersuch, NW SE NW Sec. 10-17-7	S.D. 915 ft.
NORTON COUNTY	
Richards et al's No. 1 Colby, Sec. 17-4-21w	Rig.
OSAGE COUNTY	
Briggs & Smith's No. 1 Wood, SE NW Sec. 21-14-15	S.O. 2,190-2,200 ft.; temp. abnd.
PRATT COUNTY	
Ninnescah O. & G. Co.'s No. 1 Hardesty, SW SE SE Sec. 28-27-11w	Drlg. 1,875 ft.
RENO COUNTY	
National Union's No. 1 Hill, NE SE Sec. 18-24-4w	Location.
Martin et al's No. 1 Yadu, C NW NW Sec. 15-24-5w	S.D. 318 ft.
RICE COUNTY	
Langston et al's No. 1 Wells, NE SE Sec. 4-20-9w	Rig.
Slick et al's No. 1 Arth, SE NE Sec. 27-18-10w	Drlg. 3,241-43 ft.; made 915 bbls. 10 hrs.
J. Liggett et al's No. 1 Thodel, C NW NW Sec. 11-21-7w	S.D. 50 ft.
RUSH COUNTY	
Barnsdall's No. 1 Schultz, SW cor. Sec. 3-19-16w	Rig.
Skelton et al's No. 1 Brock-Hartman, SW SE NE Sec. 4-18-16w	S.D. 50 ft.
SALINE COUNTY	
Twin Mounds Oil Co.'s No. 1 Weis, C W½ NE NW Sec. 20-13-4w	Drlg. 3,511 ft.
SEDGWICK COUNTY	
Scroggins et al's No. 1 Bartlett, NW SE NW Sec. 35-27-1	Drlg. 700 ft.
SHERIDAN COUNTY	
Flo et al's No. 1 Shoemaker, SE SW Sec. 27-7-26w	H.F.W. 4,535-45 ft.; S.D.
STEVENS COUNTY	
Argus Prod.'s No. 2 Christopher, C NE Sec. 10-33-39w	S.D. 5,521 ft.;
SUMNER COUNTY	
Austin et al's No. 1 Fog, SW SE SE Sec. 14-34-1w	Drlg. 300 ft.
Trees Oil Co.'s No. 1 Tompkins, SW Sec. 26-33-1	Location.
Trees Oil Co. and Shell's No. 1 Springate, NE SE SW Sec. 6-34-2	S.D. 3,639 ft.

Order Recently Opened Pools in Oklahoma to Cut Oil Production to Low Percentages

By W. A. SPINNEY
Staff Correspondent, Oklahoma Fields

Oil production in Oklahoma for the week ending August 13, declined approximately 15,000 bbls. a day from the previous week to a daily average of 416,850 bbls.

The unconnected producing wells in the Oklahoma City Field are to be given outlets, where land titles can be approved by the purchasing companies.

A committee has been appointed by the Mid-Continent Oil and Gas Association to investigate the reports of thefts of oil and illegal production of crude in the Oklahoma City Field.

Rentals on oil and gas leases have been reduced in Oklahoma County and a number of leases have been surrendered in scattered parts of the county.

Wildcat producing wells in all parts of the State have been pinched, and their production curtailed to a small percentage of their potential, but new field development continues at a steady rate.

Logan County promises a future to the oil operator on account of the fact that deeper producing horizons have recently been found. The discovery well in the new deep horizon has been shut in until the demand for crude oil increases.

Potential gauges on all wells in the West Seminole Field and the Monett Field, in Pottawatomie County, were completed.

Naval reserves in western Osage County are considered attractive areas for future development.

Ten Wells Without Connections

Arrangements are being made by the proration committee for pipe line connections to all of the unconnected wells in the Oklahoma City Field. At the present time there are 10 wells without connections scattered in different parts of the field. E. F. Guidinger, representing the pipe line interests, and who has been working on the situation since his appointment; R. G. Rapp, representing the independent producers, and Wirt Franklin, representing the refiners, comprise the committee.

A meeting of representatives of the purchasing companies was held in Tulsa, August 11, and it was found that the 10 wells had a combined daily allowable of 1,300 bbls.

Nothing definite was decided as to connecting the wells to pipe lines. But it is believed that if the owners of the properties straighten out the land titles, the purchasing companies will make connections. Some of these wells are located on town lots and it will require considerable time and expense to clear up titles.

Pipe line companies expected to make connections include the Stanolind Crude Oil Purchasing Co., Empire Pipe Line Co., Sinclair Prairie Pipe Line Co., and Oklahoma Pipe Line Co.

The Mid-Continent Oil & Gas Association has named a committee of 10 to investigate the reports of thefts of crude oil and the illegal production of crude in the Oklahoma City Field.

There is considerable work to be done before anything can be reported, and it is believed it will be several months before a report can be made.

When Ray M. Collins was umpire in the Oklahoma City Field several cases were prepared but none of them were tried.

Rental Reduced

Oklahoma County was among the last of the wildcat districts in the State to be reached in the general reduction of rentals and the surrendering of leases. During the past six months the practice has spread in that territory and now there is considerable acreage unleased in the county. This was noticeable when the Sinclair Prairie Oil Co. and others' No. 1 Kennedy in Section 4-13-1w, spudded a few weeks ago. Two 80-acre tracts were unleased three-quarters of a mile from the test. One of these tracts was located west of the test and the other south.

Blocks of leases which have been reduced include the Mid-Kansas Oil & Gas Co.'s Nicoma Park block, originally 10,600 acres, and now down to around 2,000 acres, the Slick-Urschel, Inc., Jones block on which a dry hole was drilled has been reduced considerably. The Edwards block, of the Cromwell-Franklin Oil Co., north of the state capitol, has been considerably reduced.

The Gypsy Oil Co. has added to its block in Township 13-4w, Oklahoma County, while the Pandem Oil Co.'s block at Bethany, where a dry hole was completed, is being surrendered. The Slick and others' block in Township 13-3w, has been reduced. The leases in Township 14-2w are still being held but the rentals have been reduced. The Mid-Kansas Oil & Gas Co.'s block surrounding the same company's No. 1 Messer, in Section 32-14-3w, which is estimated at 800 bbls. but is now shut in, is being held intact. It is believed this block will not be developed until there is a greater demand for crude oil.

New Producers

Attempts to make a production test of a well on the west edge of the southwest part of the Oklahoma City Field have failed several times. Ambelle Oil & Gas Co.'s No. 1 Nicholson, NW cor. SE, Section 22-11-3w, the company's first producer in the field, found the Wilcox sand at 6,462-6,582 feet. It is located near what is believed to be near the west edge of the sand zone in that part of the field. The well is being prepared for completion.

The west offset to this well is Grison Oil Co.'s No. 1 Little, NE cor. NE NE SW, Section 22-11-3w, which has met with several reverses after being drilled to a total depth of 6,550 feet. The 6-inch casing was landed at 6,430 feet. It was being prepared for completion a month ago when the tools were lost in the hole and fishing job developed. The tools were cemented off and new hole made. It bridged near the bottom after bailing down.

Another large well was completed in this part of the field during the week. Harrell & Davis' No. 2 Fish, NE cor. SE SE, Section 22-11-3w, flowed 1,426 bbls. of oil in one hour. The production was found in the Wilcox sand at 6,440-6,552 feet.

Slick-Urschel, Inc.'s No. 17 Classen-Edwards, NE cor. SW SW, Sectioin 3-11-3w, in the north end of the Oklahoma City Field, flowed 2,515 bbls. of oil in three hours from the Wilcox sand at 6,488-6,515 feet.

Wildcats Curtailed

Notwithstanding the fact that the wildcat and semiwildcat producing wells in the Greater Seminole area have been curtailed to 50 bbls. a day, at the suggestion of Umpire Ray M. Collins, field work continues at a steady pace. Many believed this curb would reduce drilling operations in the district. The allowable production from the Fish and from the Wewoka townsite pools was reduced.

The East Earlsboro Calvin sand production, with a potential of 4,000 bbls. a day, will be pinched to 200 bbls. daily.

The County Line Pool, along the boundary of Lincoln and Creek Counties, in Section 1-15-6, which has a potential of 1,500 bbls. a day was ordered curtailed to 150 bbls. a day. However, all the producing wells in this pool are shut in awaiting a pipe line connection.

West Konawa Field, in Pottowatomie County, has a potential production of 1,631 bbls. daily and has been pinched to 150 bbls. a day.

Some form of curtailment is expected to be announced in the western part of Osage County, where the Bay Oil Co. has a wildcat which has been producing 50 bbls. a day. The case is pending a decision of the Department of the Interior.

The semiwildcat wells in the Holdenville area of Hughes County, have been pinched to 50 bbls. a day.

Deeper Producing Horizon

Finding of a deeper producing sand in Logan County, in the old Roxana Pool, has stimulated activity in the entire area. It is the deepest producing horizon in the State outside of the Oklahoma City Field. The well has been shut in and it may remain so for an indefinite period.

Operators with leases surrounding the Shell Petroleum Corp.'s No. 6 McCully, NE cor. SW SE, Section 30-19-4w, Logan County, which was drilled deeper from the Wilcox sand horizon at 5,944 feet to the School Land sand, a new producing horizon at 6,169-73 feet, where it started to produce 1,100 bbls. a day, and after being produced for about 10 days was shut in, have made a tentative agreement to restrict further drilling of other wells in that territory until the market demands warrant, and the Shell Petroleum Corp.'s No. 6 McCully will remain shut in under this agreement. Companies owning leases in the territory include Cosden Oil & Gas Co. and Wentz Oil Corp.

The Wentz Oil Corp.'s No. 2 Williams, NE cor. NW, Section 31-19-4w, and the Cosden Oil & Gas Co.'s No. 1 Gardner, NE cor., Section 31-19-4w, were preparing to rig up to be drilled deeper from the Wilcox sand to the new producing horizon.

The Magnolia Petroleum Co., which has been successful in deepening some of its wells in the Perry area, in Noble County, may continue to drill deeper in other wells, but the allowable production remains at a fixed amount and additional flush production will not increase the allowable.

The Magnolia Petroleum Co.'s No. 1 Woolison, NE cor. SE NE, Section 21-21-2w, Noble County, was rigging up to drill deeper. Its old total depth was 5,223 feet. The company has had success in deepening its wells in this area. No. 1 A. Young, NE cor. NW NW, Section 22-21-2w, Noble County, was completed in January, 1930, in Misener sand at 5,105-08 feet for 1,400 bbls. a day. When the well ceased to flow it was drilled deeper to 5,119 feet where it increased its flow to 1,020 bbls. a day.

Potential Gauges

The taking of gauges in the West Seminole Pool was completed on July 28, showing a potential of 8,237 bbls. daily on a 10-day gauge from four wells. On account of overproduction these wells will not produce the 44 per cent allowed until they are even with production. Leases included in the gauge were Amerada Petroleum Corp.'s Chase, making 3,214 bbls.; Morris, making 382 bbls.; Gypsy Oil Co.'s Pompey, making 2,121 bbls.; and The Texas Company's Sanderlin, making 2,520 bbls.

The Monett Pool, in southern Pottawatomie County, shows a potential of 1,698 bbls. on a 10-day gauge. The leases included in the gauge were Amerada Petroleum Corp.'s Mitchell, making 801 bbls.; Carter Oil Co. and others' Monett, making 172 bbls.; Pure Oil Co.'s Tucker, making 437 bbls.; and Viven Oil Co.'s Lucas, making 289 bbls. This area is now included in the St. Louis Pool and is allowed to produce 44 per cent of its potential.

Amerada Petroleum Corp. and others' No. 3 in the SW cor. NW SE Section 29-9-6, in the West Seminole Field, flowed 1,949 bbls. of oil in 23 hours, on the gas lift, from the Wilcox sand at 4,069-98 feet.

Mid-Continent Petroleum Corp.'s No. 1 in the NW cor. NE Section 6-6-5, Pottawatomie County, swabbed and flowed 90 bbls. of oil from the pay horizon at 2,831-52 feet. The well is now shut in awaiting pipe line connection.

Hilton Phillips and others' No. 1, C SW SE Section 21-7-4, Pottawatomie County, found a sand at 3,662-3,705 feet, where fluid rose 2,000 feet in the hole. It was estimated that 1,700 feet was oil and 300 feet water.

Gypsy Oil Co.'s No. 1 McMasters, in Section 25-6-4, is shut down for proration after finding the Viola lime at 3,305-3,313 feet. It will be shut down for 16 days before drilling is resumed.

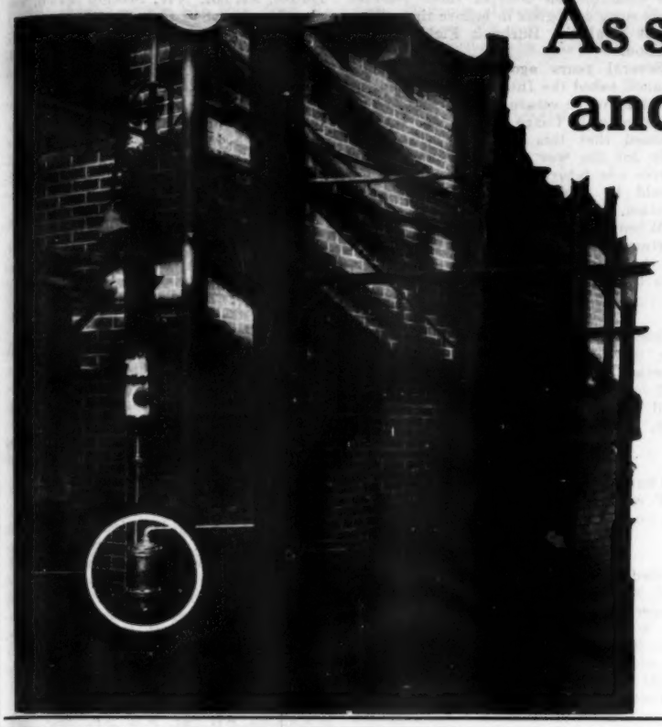
New Wilcox Sand Well

Shock and Phillips Petroleum Co.'s No. 1 Fish, C SW SE Section 25-10-11, in eastern Okfuskee County, was originally completed in January, 1923, for 70 bbls. a day on the pump from sand at 3,082-95 feet. It was drilled deeper to the Wilcox sand at 3,911-17 feet, where it was estimated to be making 75 bbls. of oil a day. The top of the Viola lime was found at 3,856 feet, and at 3,876 feet gas was found, estimated at 2,000,000 feet a day. This well is the first Wilcox sand well completed in the area. The three offsets that were completed in the 3,100-foot pay sand will probably be drilled deeper to the new pay.

Amerada Petroleum Corp.'s No. 1 in the C SW NW SE Section 25-19-4, Payne County, found the Simpson sand at 3,730 feet and Wilcox sand at 3,772-3,823 feet, where fluid rose 2,300 feet in the hole, 700 feet of which was oil, from the Simpson sand at 3,745-57 feet. It was plugged back to 3,750 feet, shutting off the bottom hole water. It was given a shot of 20 quarts after the plugs were drilled and it swabbed 25 bbls. of oil in 12 hours. The shot damaged the casing and it was pulled out and new casing was being landed.

The two naval reserves in Osage County may yet be put up at auction by the Department of the Interior. Recent successful completions not far removed from the reserves and new work under way give strength to the opinion that the reserves may develop oil pools of real importance.

The smaller of the tracts is located south of the Burbank Field, and consists of approximately 12,800 acres in Townships 25 and 26, Range 6. The other consists of 22,400 acres located in Townships 23 and 24, Range 7. The data on



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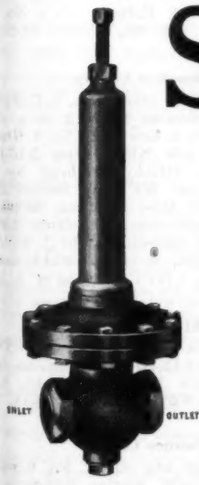

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8-18-32

the structure on both of these reserves leads some geologists to believe that either might rival the Burbank Field in production.

Several years ago the Osage Tribal Council asked the Interior Department at Washington to return both of these naval reserves to the Osage Nation. The Indians claimed that this area was withdrawn only for the war emergency. If the reserves are returned to the Indians they would be sold in quarter sections at auction.

When the Marland Oil Co.'s gas department held a gas lease on a portion of the smaller reserve some years ago, two tests drilling for gas found oil.

Carter County

Simpson and others' No. 7 Walker, SE cor. SW SW NW, Section 10-4-2, is a location. Athey & Lively's No. 1 Pierce, NE cor. SE, Section 18-2-2w, an old well drilling deeper, total depth 2,020 feet, rigging.

Comanche County

Chamberlin and others' No. 1 Price, SW cor. NW NE, Section 30-2-9w, is a rig on the ground.

Creek County

Gled Oil Co.'s No. 2 Holmes, SW cor. NE, Section 25-19-8, an old well drilling deeper, total depth 2,267 feet, rigging. W. S. O'Hair and others' No. 10 Newton, SE cor. NE SE, Section 35-17-11, an old well drilling deeper, total depth 2,050 feet, rigging. Murta & Sherry's No. 1 Porter, NW cor. SE SE, Section 6-16-11, is a machine. Wallace's No. 1 White, SE cor. NW SE, Section 3-15-7, is a rig. A. W. Swift and others' No. 2 Coonrod, NW cor., Section 3-19-9, made 30 bbls. from 2,022-45 feet after a shot of 110 quarts. Gled Oil Co.'s No. 3 Boyd, SW cor. NE NW, Section 29-19-9, made 110 bbls. after a 180-quart shot at 2,172-2,227 feet. Dixie Drilling Co.'s No. 5 Walker, NE cor. SW SW, Section 21-18-9, an old well drilling deeper, total depth 2,822 feet, was drilling at 2,970 feet. Gibson and others' No. 1 Sellers, SW cor. NE SW, Section 30-17-7, was abandoned at 3,238 feet. Sheridan Oil Co.'s No. 2 Skinner, C W half SE, Section 1-16-11, made 8 bbls. from 1,895-1,908 feet after a 40-quart shot. Shamblin & Smith's No. 2 Wilson, NE cor. SE NE, Section 21-15-8, made 80 bbls. from 2,814-28 feet. Atlantic Oil Producing Co. and others' No. 1 Harjo, NE cor. SE, Section 27-14-10, made 692 bbls. from 3,268-72 feet. J. L. Wirick and others' No. 1 Porter, SE cor. NE, Section 34-14-10, made 15 bbls. from 2,657-72 feet after a 40-quart shot, total depth 3,321 feet.

Grady County

J. Ray's No. 1 Johnson, SE cor. NE NW, Section 6-3-5w, an old well drilling deeper, drilling at 2,065 feet.

Hughes County

Mid-Continent Petroleum Corp.'s No. 1 Harjo, NE cor. SE, Section 9-7-8, is a location. Same company's No. 2 Tiger, SW cor. SE NE, Section 9-7-8, is a rig. Burke Greis Oil Co.'s No. 1 Chapman, SW cor. NW, Section 10-7-8, is digging cellar. Manahan and others' No. 1 Narconary, NE cor. SW SW, Section 10-7-8, is a location. Taylor and others' No. 1 Emery, NE cor. SW, Section 28-7-8, was abandoned at 3,287 feet. Fremire Oil & Gas Co.'s No. 1 Hampton, NE cor. NW NE, Section 20-8-10, was spudding.

Logan County

Eason Oil Co.'s No. 1 Gun Club, NW cor. NE, Section 10-16-4w, is a rig. Shell Petroleum Corp.'s No. 6 McCully, NE cor. SW SE, Section 30-19-4w, made 1,115 bbls. from 6,169-73 feet, an old well drilling deeper.

Marshall County

L. H. R. Oil Co.'s No. 1 Flint, CEL NW SE, Section 3-7s-6, is rigging. Southward & Harvey's No. 1 Howard, NE cor. SE, Section 10-7s-6, was rigging. Goddard and others' No. 9 Marshall, SE cor. NW SE, Section 30-5s-6, is a rig on the ground. W. M. Smith's No. 1 McDuffee, SE cor. NW, Section 3-7s-6, was abandoned at 845 feet. Thrailkill's No. 1 Spence, NW cor. NE, Section 10-7s-6, was abandoned at 917 feet. R. H. Kinsey's No. 1 Tell, SE cor. NW, Section 18-7s-6, was abandoned at 200 feet. Kingston Oil Co.'s No. 1 Johnson, NW cor. NE NE, Section 31-7s-6, was abandoned at 850 feet. Goddard and others' No. 8 Marshall, SW cor. SE NW SE, Section 30-5s-6, made 10 bbls. from 602-14 feet, total depth 700 feet.

Muskogee County

Mack Drilling Co.'s No. 1 Barnett, CWL SW NE, Section 34-16-15, was completed for 1,000,000 feet of gas at 1,108-25 feet.

Noble County

Magnolia Petroleum Co.'s No. 1 Woolcson, an old well drilling deeper, NE cor. SE NE, Section 21-21-2w, made 685 bbls. from 5,223-33 feet. Magnolia Petroleum Co.'s No. 1 Young, NE cor. NW NW, Section 22-21-2w, an old well drilling deeper, made 1,028 bbls. from 5,105-19 feet.

Oklahoma County

Indian Territory Illuminating Oil Co.'s No. 3 M.K.&T., NE cor. SE SE, Section 34-12-3w, was digging cellar. Stauffer & Stephens' No. 1 Anderson, NE cor. NW SE, Section 15-11-3w, is digging cellar. Clements and others' No. 1 Little, NE cor. NW NE, Section 27-11-3w, is digging a cellar. Heenan & Coe's No. 1 McKee, SE cor. NW NE NW, Section 3-11-3w, made 5,597 bbls. from 6,311-6,460 feet. Phillips Petroleum Co.'s No. 1 Calkins, SW cor. NW NE, Section 3-11-3w, made 8,923 bbls. from 6,311-6,477 feet. Slick and others' No. 16 Classen-Edwards, NE cor. SW SW, Section 3-11-3w, made 2,136 bbls. after a 160-quart shot from 6,430-96 feet. Ambelle Oil & Gas Co.'s No. 1 Richolson, NW cor. SE, Section 22-11-3w, made 2,256 bbls. from 6,462-6,578 feet, in 3½ hours. Phillips Petroleum Co.'s No. 1 Gates, SW cor. SE NW NE, Section 22-11-3w, made 1,911 bbls. in four hours from 6,486-6,530 feet.

Osage County

Johnson Oil & Refining Co.'s No. 1 well, SE cor. NE SE, Section 11-23-7, is a rig.

Okmulgee County

Henderman and others' No. 1 Loffard, C NW NE, Section 17-13-12, is a rig. Midwestern Oil & Gas Co.'s No. 1 Grayson, SE cor. SW NE, Section 5-13-14, is a machine. Tiffany Brothers' No. 2 Cousins, SE cor. NE SW, Section 25-16-11, made 5 bbls. after an 80-quart shot at 2,200-35 feet, total depth 2,464 feet. Karan & Zimerman's No. 1 Fields, NW cor. SE SE, Section 21-16-14, made 42 bbls. from 1,767-79 feet after a 15-quart shot.

Okfuskee County

Walker's No. 1 Hawkins, CSL NW NE, Section 3-11-11, is a rig on the ground. Havel's No. 2 Likowski, NE cor. SE NE SW, Section 23-11-11, is a machine.

Pawnee County

L. D. Simons and others' No. 6 well, SW cor. NE NW, Section 2-21-8, is a location.

Pontotoc County

Blackwell Oil & Gas Co.'s No. 1 Abbott, NW cor. SW NE, Section 14-4-6, is a location. Superior Oil Co.'s No. 5 Mauldin, SE cor. SW NW, Section 32-5-5, made 60 bbls. from 2,481-94 feet. Texhoma Oil, Inc.'s No. 1 Milner, NW cor. NE SW, Section 27-5-6, made 30 bbls. from 1,485-1,500 feet, total depth 1,950 feet. Delany & King's No. 3 Smith, SW cor. SE NE, Section 29-5-8, made 30 bbls. from 852-65 feet after a 10-quart shot.

Pottawatomie County

Williams' No. 1 Weldfelt, SE cor. NE NE, Section 3-7-4, is a rig. Magnolia Petroleum Co.'s No. 1 Davis, SE cor. NE NE, Section 15-7-4, an old well drilling deeper, was at 4,225 feet. Mid-Continent

Petroleum Corp.'s No. 4 Archer, SE cor., Section 14-6-3, made 135 bbls. from 3,485-3,506 feet after a 10-quart shot. Papoose Oil Co.'s No. 1 Horn, NW cor., Section 24-6-3, was abandoned at 3,941 feet. Magnolia Petroleum Co.'s No. 1 School Land, NE cor. NW, Section 36-

(Continued on Page 63)

Wildcat Operations in Oklahoma

Northern Oklahoma

ALFALFA COUNTY

Company, farm and location—	Remarks:
Smith Brothers' No. 1 Forbes, SE cor. NW NW Sec. 12-27-11w	S.D. 1,232 ft.
J. W. Bailey's No. 1 Acre, SW cor. NE Sec. 14-24-11w	S.D. 5,502 ft.

ATOKA COUNTY

E. B. Croxton's No. 1 Mason, NW cor. Sec. 2-1-14	Abnd. 275 ft.
E. B. Croxton's No. 2 Mason, SE cor. NW NW NW Sec. 2-1-14	Drlg. 95 ft.
Willis et al's No. 1 Roland, NW NE SE Sec. 6-1-15	S.D. 810 ft.
Hicks et al's No. 1 Norris, NE NW SE Sec. 15-1-15	Drlg. 110 ft.
Newman et al's No. 1 Bassett, C NW Sec. 18-1-15	S.D. 110 ft.

BECKHAM COUNTY

Pattel Royalty's No. 1 Goose Tree, SW SE SW SE Sec. 32-10-23w	Rig.
Price-McFann's No. 1 Webster, C SW SW Sec. 34-8-26w	T.D. 2,344 ft.; plugged back to 1,890-1,900 ft.; 1,500,000 ft. gas; completed.
Mid-Texas Co.'s No. 1 Sidell, NE cor. SW SW Sec. 17-22-22w	S.D. 2,550 ft.
White et al's No. 1 Green, SW cor. Sec. 34-10-24w	S.D. 3,575 ft.

BLAINE COUNTY

Watonga Petroleum Co.'s No. 1 Masters, SW NW NW, Sec. 27-16-11w	Drlg. 282 ft.; C.O.
Washoma Oil Co. et al's No. 1 Phillips, C NW SW Sec. 13-19-10w	S.D. 5,115 ft.

CADDO COUNTY

Abernathy & Brown's No. 2 Houston, Sec. 24-6-13w	S.D. 1,115 ft.

CHEROKEE COUNTY

La Piere et al's No. 1 Woods, C SE SE Sec. 27-17-21	S.D. 1,504 ft.

COAL COUNTY

Funk & Russell's No. 1 Miller, SE NE Sec. 10-2-8	Landing 5-in. csg. 2,395 ft.
Radial Oil Co.'s No. 1 McGraw, NE NW Sec. 2-1s-8	S.D. 1,450 ft.

COMANCHE COUNTY

G. W. Stogner's No. 1 Doebel, C SW SW Sec. 3-3-9w	S.D. 1,450 ft.

CREEK COUNTY

E. L. Jillson et al's No. 1 Starr, SE NW Sec. 18-15-8	Drlg. 1,340 ft.

CUSTER COUNTY

Miley Pet. Co.'s No. 1 Caldwell, NE Sec. 12-14-14w	Location.

ELLIS COUNTY

L. C. Hierek's No. 1 Roper, C SE NW Sec. 21-20-24w	Rig on ground.

GRADY COUNTY

English Drlg. Co.'s No. 1 Heenan-Coe, NE SE NE, Sec. 32-3-7w	Show oil 3,255-87 ft.
E. L. Love et al's No. 1 White, SE cor. NW Sec. 9-24-6w	S.D. 5,850 ft.

GREER COUNTY

French's No. 1 Murphy, SW NW Sec. 23-7-21w	S.D. 1,645 ft.

HASKELL COUNTY

Ault et al's No. 1 Hall, NW SW SW Sec. 14-9-19	S.D. 2,000 ft.
Ault et al's No. 1 Hall, SE NW Sec. 25-19-9	S.D. 200 ft.

HUGHES COUNTY

Hudspeth et al's No. 1 Harron, NW NE Sec. 3-8-8	Rig on ground.

KAY COUNTY

Bluebaugh et al's No. 1 Indian, C NW NE Sec. 30-25-1	10,000,000 ft. gas 2,556-63 ft.; mudding off gas est. at 5,000,000 ft.
Lewis et al's No. 1 Harris, SE NW Sec. 14-25-1	Location.
Mummert Drlg. Co. et al's No. 1 Cormick, C NW SE Sec. 9-27-2	S.D. 3,693 ft.
Blackwell Oil Co.'s No. 1 Harshman, Sec. 2-26-1w	Rig on ground.

KIOWA COUNTY

Christian's No. 1 Jones, NE SE Sec. 8-7-18w	S.D. 1,418 ft.

LATIMER COUNTY

P. English's No. 1 Unknown, NW SE Sec. 16-6-19	S.D. 1,542 ft.

NOBLE COUNTY

Wentz Oil's No. 1 Wolff, C SE NW Sec. 17-20-2w	Drlg. 3,460 ft.

OKLAHOMA COUNTY

Sinclair Prairie's No. 1 Kennedy, C SE NW Sec. 4-13-1w	Drlg. 572 ft.
Citizens Oil Co.'s No. 1 Sage Barber, NE cor. Sec. 21-11-3w	S.D. 1,200 ft.
L. C. Hivick's No. 1 Sunset Addition, NW SW NW Sec. 17-11-3w	S.D. 5,515 ft.

OSAGE COUNTY

Mohawk Oil Co.'s No. 1, NE cor. Sec. 10-26-9	1,575-1,633 ft.; pumping water.

PAWNEE COUNTY

Rockstool's No. 1 Wylie, NW NE SW Sec. 6-20-5	S.D. 1,950 ft.

PITTSBURG COUNTY

Tate Oil Co.'s No. 1 Fulton, SE cor. Sec. 34-7-14	Drlg. 2,950 ft.
Nelson & Flynn's No. 1 Anderson, NE SW Sec. 12-7-13	S.D. 620 ft.
J. Morrison's No. 1 Fowler, NE SE Sec. 13-7-17	Rig.
C. Kennedy's No. 1 Travis, C SW NE Sec. 15-7-14	Rig.
Moffett & Hall's No. 1 Jones, NW cor. Sec. 14-8-14	S.D. 1,620 ft.

PONTOTOC COUNTY

Williams' No. 1 Krath, NE SE Sec. 33-3-4	Location.
Edna Marie's No. 1 McWhirt, NE SE Sec. 11-2-6	S.D. 570 ft.
Vanderalice's No. 1 Meredith, NE SW Sec. 17-2-4	Show oil 295-308 ft.; 5 bbls.; completed.
Sunray Oil's No. 1 Grant, SE NE Sec. 11-4-8	Fishing 1,410 ft.

POTTAWATOMIE COUNTY

Brown et al's No. 1 Sauter, NW cor. Sec. 35-11-4	Digging cellar.

ROGER MILLS COUNTY

Ute Oil Co.'s No. 1 Williams, C SW Sec. 23-12-24w	S.D. 5,150 ft.
L. C. Hivick's No. 1 Davis, C NW NE Sec. 4-11-26w	S.D. 3,420 ft.

SEMINOLE COUNTY

Donnelly et al's No. 1 Shepard, SE NE Sec. 4-8-8	Drlg. 790 ft.

WASHITA COUNTY

Miley Pet. Co.'s No. 1 Wolfe, NE SW Sec. 23-9-17w	Rig.
Cooper & Terhune's No. 1 Blocker, NW cor. Sec. 29-8-19w	Show oil 2,459-67 ft.; S.D. 2,757 ft.
Burns & Prince's No. 1 Deck, SW cor. Sec. 21-8-18	S.D. 2,002 ft.

Oklahoma Panhandle

TEXAS COUNTY

Three Way Oil Co.'s No. 1 Crane, SW NW Sec. 11-1-1E	T.D. 4,720 ft.; to cement.

Southern Oklahoma

ATOKA COUNTY

Morris et al's No. 1 Ray, NE NW NE Sec. 8-2S-12	Drlg. 610 ft.
Brookshire's No. 1 R. W. Rowland, NW NE SE Sec. 18-3s-10	Fishing 2,456 ft.

BRYAN COUNTY

Hughes' No. 1 Ayres, NE SW Sec. 30-7S-7	Drlg. 650 ft.

CARTER COUNTY

Russell's No. 1 Ratliff, NW NE NW SW Sec. 19-1s-2w	Drlg. 1,740 ft.

MARSHALL COUNTY

J. T. Hogan's No. 1 Thompson, NE NW NE, Sec. 26-7s-6	Location.
Thrailkill et al's No. 1 Spence, NE NW Sec. 10-7s-6	T.D. 917 ft.; S.D.

McCURTAIN COUNTY

Prassell et al's No. 1 Wagoner, SE NE Sec. 5-8s-27	Show oil 560 ft.; 620 ft.; drlg. 960 ft.
Stampfs' No. 1 Robert Harris, SW NW SW Sec. 14-9s-25	S.D. 2,778 ft.

PUSHMATAHA COUNTY

Whitehead et al's No. 1 Messer, SE SW SW Sec. 35-3s-18	S.D. 1,950 ft.

STEPHENS COUNTY

Gillette Bros.' No. 1 Cooley, NW SE NW Sec. 17-2s-8w	Rig.
George's No. 1 Ryan, NW SW NE Sec. 31-3-15	S.D. 510 ft.

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Test Near Louisville Has Good Showing of Gas; Continuing Activity in Indiana Field Report

By GEORGE A. WHITNEY
Staff Correspondent, Central West Fields

FINDLAY, Ohio, Aug. 15.—Few completions were reported from any division of the Central West Fields, although it is reported that considerable work will be done for the next few months in all of the fields. The Lima or Northwestern Ohio, Field, according to reports, will show much more activity than for several months.

The Lima crude oil situation, in common with the oil business everywhere, is showing improvement, according to Murray Chidester, old-time operator of Bowling Green, Ohio, secretary of the Lima Crude Oil Improvement Association. For the first six months of this year the National Refining Co. and the Standard of Ohio have used some 500,000 bbls. of Lima crude. Producers are now selling all of their output, whereas some time ago that had to store half of it. The price of the product of the local field has gone from 55 cents to $1.15 a barrel. "These results reflect not only a bette routlook for the producer of Lima crude," said Mr. Chidester, "but to the labor employed in the field, pipe line companies, merchants, farmers, royalty owners and taxpayers." An increase in demand for gasoline and oil will continue to improve the situation, it was added.

The Erie Oil & Gas Co. drilled a second test on the McLeod Brown farm, Section 21, Tymochtee Township, Wyandot County, which has a light volume of gas, along with 2 bbls. oil production, from the Trenton lime from 1,378 to 1,421 feet.

The Tiffin Field in Seneca County, in the northwestern Ohio area, is the most active development in the Lima Field at this time, as there are seven wells under way in Hopewell and Liberty Townships, where shallow gas is found.

CENTRAL OHIO

Only five wells were reported completed in the Central Ohio Field, two producers with an initial of 15 bbls., two gas wells and one dry hole. The best oil producer announced was the Preston Oil Co.'s second test on the J. R. Rine farm, Section 16, Perry Township, Coshocton County, which produced an initial of 10 bbls. from 3,118-73 feet. The Emerald Petroleum Co.'s No. 3 Arta M. Cochran farm, Section 10, Fallsburg Township, Licking County, produced 5 bbls. from 759 to 766 feet.

Palmer & Geisinger's test on the John R. Williams farm, Section 11, Washington Township, Muskingum County, is a dry hole at 4,085 feet. Wittmer Co.'s second test on the Carl N. Riley farm, Section 11, Perry Township, same county, is drilling.

Frey and others drilled a fair gas well in No. 3 on the J. R. Weaver farm, Sections 3 and 4, Fairfield Township, Tuscarawas County, from 5,107-11 feet.

A. C. Peters and others' test on the John Mason farm, Section 27, Somerset Township, Belmont County, is showing for a fair gas well in the Berea sand at 1,901 feet. Same firm made a location on the Stephens & Knox farm, Section 27, same township. E. P. Crouch and others have a light gas showing on the Oscar Jones and others farm, Section 27, Kirkwood Township, same county, in the Second Cow Run sand at 635 feet, but may drill for a deeper pay sand.

Faulkner and Phelps struck a gas pay in the Berea from 709 to 746 feet in No. 5 on the Guy Z. Humm farm, Section 29, Mohican Township, Ashland County, but may also test a lower formation.

Wiser Oil Co. made a location on the William C. Porter farm, Section 12, Carlisle Township, Lorain County. McMillan and others are drilling on the Henry Schildt farm, Section 15, same township.

H. E. Perkins is drilling on the D. S. Shider farm, Section 7, Newcastle Township, Coshocton County. Clyde Cody is drilling at 1,235 feet at his No. 4 on the Charles Ackley farm, in Fractional Section 6, Carthage Township, Athens County. A. D. Townsend is drilling No. 6 Homer Riley farm, Section 34, same township, and Carpenter & Glazier are drilling No. 14 N. and C. Curtis farm, in Fractional Section 33, Berne Township, same county.

Brendall and others are drilling on the William and Clara Reikowski farm, Section 25, Jackson Township, Stark County, and the Fulton Oil & Gas Co. is drilling on the Henry C. Rudy farm, Section 7, same township. Sisler and others have a rig in for No. 3 on the Eva M. Sisler farm, Section 26, same township.

East Ohio Gas Co. has a rig on the Frank Dix farm, Section 12, Jackson Township, Stark County, and has made locations for three new wells, as follows: No. 6 on the R. K. Harris farm, Section 26; No. 1 on the F. T. Hinkle farm, Section 12; and No. 1 on the L. and M. Reed farm, same section.

George Jewell and others are drilling on the Joseph Miller farm, Section 5, Monroe Township, Guernsey County. Quillan and others are drilling No. 1 Elmer E. Hamilton farm, Section 10, Wheeling Township, same county.

INDIANA

Indiana oil and gas reports compiled by Paul F. Simpson, state gas supervisor, Department of Conservation, Division of Geology, Indianapolis, Indiana, follows:

Crawford County—The Arthur Beasley test in SE Section 32, Sterling Township, drilled by Pfeiffer and others, was plugged at 2,677 feet, after going into the Trenton 119 feet.

DuBois County—Ohio Oil Co.'s test well in SE Section 25, Harbison Township, was dry and plugged at 1,730 feet, on the David Neukam, Jr., farm.

Gibson County—No. 3 Lottie Hope, drilled by the Big Four Oil & Gas Co., SE Section 18, Washington Township, was completed with 110 bbls. natural

(Continued on Next Page)

Interesting Tests in the East Continue Drilling; But Completions Small Wells or Dry Holes

By STAFF CORRESPONDENT

PITTSBURGH, Pa., Aug. 15.—The lower eastern field continued its poor showing in the total of wells completed and although its three districts were all represented, there were but four producers, with an initial production of 10 bbls., and one gas well. In addition five dry holes were reported. Except for the interest in the wildcat drilling the week was uneventful.

VIRGINIA

In Virginia, the test of Davis Elkins and others on the Smith farm in Buchanan County, the second well drilled by these operators in this vicinity, reached 5,435 feet. Some excitement was caused when the tools encountered gas at 5,010 feet but it was in small volume. This well is about 7,500 feet southwest of their No. 1, a good gas well, on the Earl S. Ridgeway farm in Scott County and the derrick floor elevation is about 104 feet above the first test. However the formations dip towards this second test, a difference of over 700 feet being noted in the depth of the St. Louis lime in the two wells. The second well was spudded in with 13-inch casing, followed by 2,512 feet of 8⅝-inch casing and then 3,655 feet of 6⅝-inch casing.

Of the three Benedum & Trees tests, the I. Kaufman in Wise County, and the Clinchfiell Coal Co. in Russell County, made fair headway during the week but encountered no production at the shallower formations around 2,000 feet. The third in McDowell County, West Virginia, and on the Pocohontas Coal Co. tract made fair headway around 3,500 feet with no results. In Washington County, Virginia, the Brehn & Co. test on the J. M. Arnold farm remains shut down testing the casing.

SOUTHEAST OHIO

Three small producers and three dry holes was the total of the week's work in Southeast Ohio. Interest centers in the deep test drilling on the E. E. Knowlton farm, NW Section 10, Independence Township, Washington County, where E. E. Grimm and Benedum & Trees have reached 4,250 feet, making good progress down to the lime. The test has been void of any showing thus far.

In Medina County, the Oko Oil & Gas Co. completed its No. 36 on the Sanford and Watson lease in Section 10, Chatham Township. It was drilled in the Berea grit at a depth of 363 feet and produced 5 bbls. the first day after shot. In the same township but Tract 9, Lot 9, E. R. Edson & Son Co. drilled No. 3 on the D. M. Geisinger farm to 515 feet through the Berea grit. It proved a dry hole.

In Morgan County, B. Hazlett and others completed two small wells on the Brown Manly Co. lease in Section 3, Union Township. They were both completed in the First Cow Run sand and will make very light producers. Both were tests on this tract and a third well is drilling.

In Licking County, the Wehrle Co. drilled a test on the C. F. Kreager farm, Lot 33, Hopewell Township, through the Clinton sand which proved dry. In Guernsey County, the Ohio Fuel Gas Co. had a similar result in its test on the L. B. La Follett farm, Lot 9, Cambridge Township. It was dry in the Niagara lime.

Drilling in Ohio

In Licking County, the Emerald Petroleum Co. is drilling No. 3 on the Sarah J. Little farm in Section 8, Fallsburg Township, and the depth is now 2,750 feet. In Hopewell Township, and Section 3, the Wehrle Co. has No. 3 drilling on its own tract which is down 1,800 feet. J. W. Rutledge and others have reached 2,200 feet in their No. 4 on the William D. Booth farm, Section 14, Fallsbury Township.

In Perry County, M. H. Bauman is shut down on the top of the sand in his test on the Elmer Vansickle farm in Section 5, Reading Township. In Jackson Township, W. G. Perrigo & Co. are ready with a rig for No. 6 on the J. A. and W. E. Donnelly farm in Section 1. In the shallow sand district of the county, N. L. Altier is drilling No. 11 on the Mike Lemity farm, Section 34, Pleasant Township, and in Monroe Township the Huntington National Bank has No. 26 down 220 feet in the Rodgers Brothers farm, Section 22.

In Coshocton County the Murphy Petroleum Co. and others have a rig standing on the John S. Rine farm in Section 1., Perry Township. This is a development from the Preston Oil Co.'s test on the John R. Rine farm in Section 16, which was a 10-bbl. natural producer during the past month, though of Corning grade oil. In Fairfield County, the Blum Oil & Gas Co. has rigged up for No. 3 on the J. J. McCandlish farm in Section 26, Rush Creek Township.

In Muskingum County the Mehowa Oil & Gas Co. is nearing the sand in its test on the J. A. Williams farm, Section 11, Washington Township, which is now drilling at 3,500 feet. In Guernsey County E. C. Quillan and others have a rig standing on the E. E. Hamilton farm in Wheeling Township. The Capital Drilling Co. is rigging up on the Secrist heirs farm, Lot 8, Spencer Township, Guernsey County, and in Monroe Township George Jewell and others are building a rig on the J. E. Miller farm, Section 5.

In Tuscarawas County the Gordon Oil Co. has two operations. It is shut down at 3,684 feet before tapping the sand in No. 4 on the Ralph Huffman farm, Lot 35, Washington Township, and has a rig standing on the T. B. Shearer farm, Lot 34, of the same township.

WEST VIRGINIA

One producer and one dry hole was the total number of completions in West Virginia. While the total of drilling wells shows some increase, a good many listed have shut down until conditions improve.

In Harvey district, Mingo County, the Virginian Gasoline & Oil Co. completed No. 24 on the Henry Closterman farm at 1,073 feet and 25 feet in the Maxon sand. It is showing for about a 4-bbl. pumper. It is about 250 feet south of the W. H. Norton, trustee's second test on the W. R. Spalding farm.

In Calhoun County, Holly Jarvis and others drilled their test on the Hoke Jar-

vis farm in Washington district to 1,433 feet and the Salt sand proved dry. This test will be abandoned.

Drilling in West Virginia

In Washington district, Calhoun County, C. B. Lewis and others are drilling on the Louie Hamilton farm, which is nearing the Injun sand, the depth being 2,000 feet. In Center district, W. Bickerstaff and others have rigged up for a second test on the John W. Maddox farm. In the same district T. J. and A. H. Jackson have reached the top of the Injun sand in their No. 2 on their own property, the depth of the hole being 2,105 feet. W. H. Bickel has rigged up for a second test on the George D. Starkey farm. In Sheridan district, the Chemical Oil Co. has its test on the Rebecca Fling farm down to 1,881 feet. In Sherman district, Creed Barker and others have spudded in on the G. Hersman farm. In Lee district, F. F. McIntosh is drilling his No. 3 on the A. Hardman farm deeper from the Salt sand to the Injun and the depth now is 1,900 feet. The same operator has his No. 4 on the John Riddle farm in this district drilling at 1,410 feet.

In Roane County Bowers & Jackson have spudded in on the Smith and Chewning farm in Smithfield district. In Cabell County Phillip Hager and others have spudded in on the State Hospital Grounds in Guyandotte district. In Ritchie County R. L. Rinehart has started drilling on the J. B. Markey farm in Grant district.

SOUTHWEST PENNSYLVANIA

One completion and one dry hole marked the week in the Southwest Pennsylvania Field. In Hanover Township, Washington County, John Reed & Co. drilled their test on the Silas Patterson farm in the Gordon sand about 2,000 feet and found it dry. In Amwell Township of the same county J. C. Lausteuler drilled his test on the William Doak farm to 3,400 feet, the Fifth sand, and completed it for a small gas well in the 50-foot sand.

Drilling in this section has shown some improvement. In South Franklin Township, Bromly and Bungard are spudding in on the R. J. Clark farm. In this township the Martin Oil & Gas Co. is down 500 feet on the Hiram McLain farm. The Carnegie Natural Gas Co. has reached 2,800 feet on the F. Dickinson farm. In Amwell Township the second test of Raymond Orrill & Co. is awaited with interest. The tools have reached 1,400 feet on the G. L. Walker farm. The Union Gasoline & Oil Corp. test in this section, on the Mary B. Lindley farm, is still swabbing about 100 bbls. a day and is the best of the three tests either on the Walker or the Hazlett farms.

In Allegheny County O. Miller has about completed his test on the P. J. Shrum farm in McCandless Township. In the Sewickley district, C. S. Parks and others have built a rig for a second test on the Martha A. Berg farm in Alleppo Township. In Greene County J. B. Orndoff is down about 700 feet on the Mae Brown farm in Whitely Township. In Springhill Township, the Little Four Oil & Gas Co. has its No. 5 on the Sarah Roach farm drilling at 2,700 feet.

Central West Fields

(Continued from Preceding Page)

production. Same company is drilling No. 1 Ethel Kell, NW Section 18. Wabash Service Corp. is drilling No. 1 J. N. Malone, SW Section 23, Columbia Township.

Harrison County — Indiana Utilities Corp. is drilling No. 1 William Longbottom, SW Section 10, Webster Township.

Hendricks County—The French Development Corp. plugged its well on the Reitzel farm in Section 8, Liberty Township, after failing to make a Trenton producer of it.

Jay County—No. 1 William C. Bailey, drilled by N. E. Masters and others in NE Section 25, Wayne Township, came in as a strong gas well, and offsetting wells will probably be drilled in search for oil.

Johnson County—Waggoner and others are drilling a shallow well on the A. H. Vandivier farm, Section 28, Franklin Township.

Knox County—The Glengarry Oil Co. completed a gas well at 615 feet on the Emmett Blann lease in Location 261, Busseron Township, with an initial production of 1,140,000 feet. In the NW Section 13, same township, O. A. Thayer's well on the Ruby Hite farm was dry at 824 feet. The Snapp well, drilled by the Knox Engineering Corp. in Location 252 of this township, was abandoned.

Kosciusko County—Kosana Oil Corp. has started a test on the W. O. Wehrle farm in NE Section 10, Van Buren Township. This is possibly the first test located with a magnetometer in northern Indiana, and its outcome will be awaited with interest.

LaGrange County—J. W. Hunt expects to resume drilling on the Calir Shoup farm near LaGrange.

Laporte County—V. S. Hillingsworth and others are drilling No. 1 W. and C. Drollinger, in Section 33, Willis Township.

Monroe County—Ohio Oil Co. and Petroleum Exploration Corp. are starting No. 1, NE Section 28, in their Benton Township gas pool.

Ohio County — The Ira North test drilled by the Southern Development Co. in Rising Sun is shut in after reaching the upper Trenton.

Orange County—C. W. Reichard and others expect to start again in their Fred A. Cleveland test in NE Section 30, Orangeville Township, and may go to the Trenton. The well has been shut down at about 1,850 feet since last winter.

Perry County—Conyers & Bugg completed No. 5 in SW Section 19, Clark Township, as a dry hole. Ohio Oil Co.'s No. 2 on the George K. Beard lease in the same quarter section produced 1½ bbls., while No. 3 on this lease was a 30-bbl. producer. A fourth well is being started. Moorehead and Blank are drilling No. 2 James Cassidy, NW Section 21, Anderson Township. In SE Section 6, same township, Roger E. Williams is down 500 feet on the Math Gayer farm. No. 4 Alvin Franchville was completed by Conyers and Bugg in NW Section 30, Clark Township. Initial production was 25 bbls. from the Jackson sand. Black and Mann have started No. 1 Henry Law in SW Section 33, Clark Township.

Pike County—Claude E. Noble is drilling No. 1 John Arnold in SE Section 17, Washington Township. In Madison Township, H. H. Risher has started a well on the John O. Carter lease. The Indiana Southwestern Gas Corp. completed No. 1 Jennie Cassidy in NE Section 32, Clay Township, at 1,530 feet, where the initial production was 15 bbls. In Survey 5, same township, the Illpava Oil Co. is starting No. 1 Phavilla Murray. The Indiana Southwestern Gas Corp. has started No. 1 L. J. Shawhan, NW Section 34, of this township. No. 2 Jane Thomas, drilled by H. H. Risher in SW Section 19, Washington Township, was completed a dry hole at 1,143 feet.

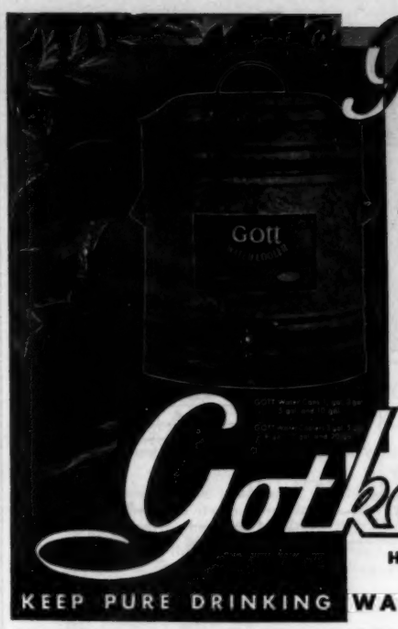
Spencer County—Vans Oil, Inc., completed a 10-bbl. well in the Mooretown sand in No. 3 A. G. Grass, Huff Township. In SE Section 8, Ohio Township, Maxwell Petroleum Corp. is drilling No. 3 Anna Hawk. Dr. C. C. Taliaferro completed a dry hole at 1,300 feet in No. 2 Hugh Stuteville in the same township.

Sullivan County — O. A. Thayer has started No. 1 Josie Frakes, SE Section 21, Hamilton Township. Scott and Whitlock are starting No. 2 Tom and Kern Metzger, SE Section 24, Turman Township. J. G. Havens completed a dry hole at 540 feet in the A. Pittman test in Curry Township.

Switzerland County—The test on the Carter lot in Vevay has drilled through the St. Peter formation, finding a hole full of Blue Lick Water. The Vevay Gas & Oil Co. has started No. 1 R. E. Crutcher, SW Section 20, Craig Township.

Vanderburg County — John L. Drake and others reported a producing well on the County Pool Farm in the SW Section 33, Center Township, and are starting another well on the John Effinger farm in NW of the same section.

Vigo County—The Sioski Oil Co. is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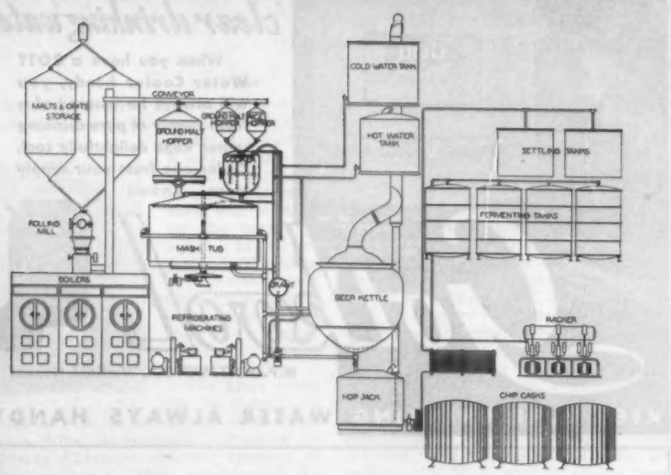

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drilling No. 22 William Riggs, Section 32, Prairie Creek Township.

Warrick County—Dr. C. C. Taliaferro is drilling the Henry Kohle test in NW Section 28, Greer Township.

ILLINOIS

Three completions were reported from the Illinois Fields, one being a light producer of oil, one gas well, one dry hole and one old well abandoned. A. M. Myers and others' test, 700 feet from the north line and 50 feet from the east line of the R. Endsley farm, SE SW Section 32, Westfield Township, Clark County, developed a light gas well at 485 feet.

Watson and others' No. 5 in the southwest corner of the E. Wilbert farm, NW Section 13, Prairie Township, Crawford County, is only a 1-bbl. producer at 1,000 feet. Frank Allison and others' test, 200 feet from the north line and 660 feet from the east line of the A. E. Weartsbaugh farm, in SE NW Section 19, Martin Township, same county, proved a dry hole.

Ohio-Silurbian Oil Co.'s No. 3 on the Mary E. Penner farm, SE Section 13, Lawrence Township, Lawrence County, has been abandoned after producing for many years.

KENTUCKY

The most interesting test of the week in Kentucky is a wildcat venture made by the Highland Petroleum Co., on the Joe DeCrouch farm, northwest of Broomfield, in Nelson County, some 36 miles southeast of Louisville. This well is reported with an initial of close to 1,500,000 feet, and should bring about additional development for gas in that area, where no drilling has been done heretofore. Much leasing has been going on three for several days and the new area may be a surprise.

Advice from Hopkins County is that a gas well has been drilled on the P. T. Lavan farm, by Marshall and others.

C. M. & H. Oil Co. is due for completion on the L. E. Skelly 340 acres, 2 miles southwest of Burkesville, and Archie McGuire is drilling a well not far from the Skelly test, both being within bounds of the rich gas wells brought in there several weeks ago.

The Times-Journal of Bowling Green, Ky., says: "We have heard comparatively little recently regarding the oil industry in Warren County, yet oil in large quantities is coming from the large well that came in a few weeks since on the Frank Davenport farm near Bowling Green. It is estimated that the flow of oil from this well will run about 300 bbls. a day. The amount is secured by a natural flow, never having been put under pump. A number of operators from Texas have been carrying forward this developing program and are expecting to drill other wells on leases they have secured. Oil can be secured in Warren County in paying quantities and the cost of production, compared to the average yield, is far less than in many other oil fields. The oil from the Davenport well has been piped to the Bowling Green Refining Co. plant, near Bowling Green. This refinery has proved a great boon to this section and will no doubt be the means of inducing other oil operators to come to Warren County and engage in developing this field, knowing that they will have a nearby market for their product."

Three Oil Wells Completed in Michigan; Atha Deep Test to Seek Sylvania Sand

By GEORGE A. WHITNEY

MOUNT PLEASANT, Mich., Aug. 15. Three oil wells with initial production of 1,010 bbls., and one gas well with a volume reported at 7,500,000 feet were struck during the week. The gas well was drilled by George Hanners of St. Louis, Mo., in the northeast corner of the Keeler-Mitchell farm, in the NE NE NW, Section 9, Broomfield Township. Isabella County, approximately 12 miles west of Mount Pleasant. While the new well does not add new acreage for exploration, it adds materially to the available output of Central Michigan natural gas and ranks well with other wells drilled in the Bloomfield gas pool. This makes 12 producing gas wells for the pool and the twenty-sixth in the area. The wells combined are reported around 110,000,000 feet of gas a day. The Isabella Oil Development Co. is drilling its No. 3 in the C SW NE, Section 9, on the Keeler-Mitchell land. The gas is from the Marshall formation.

Three oil wells were completed in the East Pool, in Greendale Township, Midland County, two large producers and one small one. The Pure Oil Co.'s No. 2 well on the W. A. Cassidy and others' farm, in the E half NW, Section 16, 990 feet from the north line and 330 feet from the east line of the lease, is reported better than 500 bbls. initial. Same company's No. 4-B well, 990 feet from the south line and 330 feet from the east line of the A. Bernard farm, SE SE, Section 9, same township, is also rated around 500 bbls. initial. Conover and Haskell's test on the Rhemonschneider farm, NW SW SE, Section 14, Greendale Township, is rated as a 10-bbl. producer, at 50 feet in the Dundee formation.

Theodore Oil Co.'s oil and gas test on the Thompson farm, near Farwell, in the SE SW NE, Section 35, Greenwood Township, Clare County, is reported drilling close to the Marshall gas sand. This test will also be drilled to the Dundee formation, and if gas is found in the Marshall, it will be bradenheaded off, so if oil is found in the Dundee, the Marshall sand gas can be easily handled.

Another interesting well is being drilled by the American Natural Gas Co., 660 feet from the north and east lines of the Elmer E. Brehm farm, SE SE SE, Section 10, Sheridan Township. Mecosta County, which is due for completion within a short period. This test is reported running high on structure and should it "hit," considerable development is foreseen in that area as the result of opening a new gas pool.

Atha's Deep Test

The deep test of the Atha Drilling Co., on the Chemical State Bank property, SW SE, Section 21, Ingersoll Township, Midland County, is being tubed at a depth of 4,500 feet for a test of the Sylvania sand at which depth a strange gas and oil was encountered. The hole was drilled below 3,700 feet with the hole full of black water and drilling was suspended when a strong flow of gas was struck below 4,500 feet. This gas flow was powerful enough to move the 4,500 feet of water standing in the hole. The owners are understood to be contemplating the use of acid after the hole is swabbed out to see if the fairly strong oil showing cannot be commercialized. This test is the only deep test now drilling in the Central Michigan oil and gas fields and holds considerable interest to oil and gas producers. The test is situated south and east of the big production in the Greendale district. It is believed that if the owners cannot make a successful producer of the test, the hole will be deepened below 5,000 feet. The Atha Drilling Co. is an old-time concern in the Central Ohio Field, having operated there for many years.

W. L. McClanahan, Inc., struck a nice flow of gas, 330 feet from the north line and 990 feet from the west line of the John Pollard farm, Section 1, Isabella Township, Isabella County, in the Marshall formation, which caused something of a sensation when it flowed a heavy

stream of water from the hole. The water is being shut off, and the test will be drilled to the Dundee formation for oil.

New Drilling Permits

Permit was issued to the Pure Oil Co. for No. 4-A well, 990 feet from the north line and 330 feet from the west line of the Iosco Land Co.'s farm, in the W half NW, Section 18, Greendale Township, Midland County; for No. 1 well, 330 feet from the north and 425 feet from the east line of the Joe Novak farm, in the E half SE, Section 7, Greendale Township, Midland County; for No. 5 well, 1,650 feet from the north and 1,650 feet from the west lines of the George A. Purtell 60-acre farm, in the E half NW, Section 15, Greendale Township, Midland County; for No. 5 well, 2,310 feet from the north and west lines of the Emma O. Reed farm, NW, Section 12, Greendale Township; to H. Snell and others for No. 1 well, 1,530 feet from the south line and 255 feet from the west line of the William F. Zeeb and others, in the NW SW, Section 34, Genoa Township, Livingston County, and to Vernor & Lockwood, for No. 1 well, 816 feet from the south line and 328 feet from the west line of the Orin L. Flood farm, SW NW, Section 34, Pentwater Township, Oceana County.

Field Pickups

Near the town of Ashley, in Gratiot County, Miller & Coombs are drilling a second test 950 feet from the north line and 1,050 feet from the west line of the J. I. Askegood farm, in the SE NW NE, Section 9, Elba Township, known as the Elba Pool, which has five gas wells, all being shallow, and reported with a volume of 5,677,000 feet. This gas contains considerable sulphur content.

Due to the continuous expanding of the East Pool in the Greendale-Midland sector, the Pure Oil Pipe Line Co. has found it necessary to map out a new gauging district. C. H. Blake, formerly station gauger at Purtell Station, was transferred to field gauger to take charge of the new district, known as No. 4. Robert Maxwell, field mechanic, took the place of gauger at Purtell. All of the tanks at Jackson tank farm, near Mount Pleasant, and several of the tanks at the Bay City terminal, have been cleaned and are ready for paint. During the past month, Bay City terminal moved out 280,382 bbls. of crude. Extension of the company's gathering system has been necessitated to take care of new production about 2½ miles east of the tank farm.

Kansas Fields

(Continued from Page 51)

Another failure was reported in Sumner County. It was Southland Royalty Co. and Watchorn Oil & Gas Co.'s No. 1 Rosecrans, SE cor. SW SE, Section 17-35-2, near the State boundary line, and north of the Dilworth Pool in Kay County, Oklahoma. It found water in the Siliceous lime at 3,507-20 feet.

A new location was announced for Ellis County, the Central Commercial Oil Co.'s No. 2 W. F. King, SE cor. SW NE, Section 20-13-21w, in the eastern part of the county, is the offset to the same company's discovery well. The No. 1 King was completed in June, 1929, for an initial production of 285 bbls. daily from a total depth of 3,950 feet. The Central Commercial Oil Co. has a 10,000-acre block of leases in Ellis and Trego Counties.

Nominations Unchanged

The umpire and agent for the Public Service Commission, L. R. Pickrell, announces that the pipe line nominations for the Ritz-Canton Field are the same as last month, and the producers of all Viola lime wells, excepting those receiving the minimum allowable, are authorized to produce their wells at 7 per cent of their potential production. The owners of chat wells, excepting those receiving full production or the minimum allowable, are authorized to continue producing at 6 per cent of their potential production.

The present daily allowable is based on the following pipe line nominations:

Company—	Bbls.
Dickey	860
Phillips	3,400
Shell	3,000
Skelly	700
Stanolind	1,100
Texas Empire	175
White Eagle	4,000
Total	13,235

The total potential production of the Ritz-Canton Field in McPherson County, on August 1, was 148,965 bbls. from 154 wells. The 62 chat producing wells had a potential of 43,377 bbls. and the 92 Viola lime wells had a potential of 105,588 bbls. daily.

The discovery well in the Wright Pool, near Valley Center in Sedgwick County, was four years old August 8, and was drilled by Bu-Vi-Bar Oil Co. The well was No. 1 Wright, SW cor. NE SE, Section 12-26-1w, making 1,728 bbls. of oil the first 24 hours from a total depth of 3,368 feet. Subsequently, more than 100 wells have been completed in the pool, which covered an area 2 miles north and south, and 1¼ miles east and west. The pool is now producing around 4,000 bbls. of oil daily. Most of the present production is owned by the Gypsy Oil Co. and the Continental Oil Co. Several pipe lines serve the field, owned by White Eagle Oil Corp., Derby Oil Co., Sinclair Prairie Pipe Line Co. and Skelly Pipe Line Co.

Chase County

Ryan and others' No. 1 Lipps, C SE SW, Section 25-18-6, was abandoned at 625 feet.

Cowley County

Sidwell and others' No. 1 Countryman, NE cor. NW, Section 4-33-7, is a location. Murphy and others' No. 2 Reservoir, SE cor. NW NW NE, Section 27-32-4, is a machine. Same operators' No. 1 Reservoir, NE cor. NW NW NE, Section 27-32-4, made 140 bbls. from 2,355-81 feet. Dickey and others' No. 1 Tibetts, NW cor. NE NW NE, Section 27-32-4, made 120 bbls. from 2,355-77 feet. Swedish-American Oil Co.'s No. 1 Sandstrom, SW cor. NE NW, Section 24-33-6, made 12 bbls. from a total depth of 2,776 feet. B. Gradllopp and others' No. 1 Weigle, NW cor. SW NW, Section 9-32-4, was abandoned at 3,500 feet.

Greenwood County

Simmons and others' No. 10 Ellis, SE cor. SW SW, Section 26-23-11, was abandoned at 1,935 feet.

Harvey County

McBride, Inc.'s No. 2 Friesen, NW cor. SW, Section 20-22-3w, is a rig on the ground. Phillips Petroleum Co.'s No. 1 Warkenline, NW cor. SW SW, Section 20-22-3w, was spudding.

McPherson County

Shawver and others' No. 2 Decker, NW cor. NE NE, Section 2-20-2w, is a rig on the ground. Lario Oil & Gas Co. and others' No. 2 Lacquement, SW cor. NE, Section 6-20-1w, is a location. Youker and others' No. 3 Gratton, SW cor., Section 24-19-2w, is a rig. Wolfe Creek Oil Co. and others' No. 3 Krehbiel, NW cor., Section 25-19-2w, is a rig on the ground. Youker and others' No. 3 Eaton, NE cor., Section 26-19-2w, is a location. United Oil & Gas Co. and others' No. 2 Smith, NE cor. NW, Section 29-19-1w, was digging cellar. Broswood Oil Co.'s No. 2 Giffin, C SW SW, Section 14-19-2w, was completed for 13 bbls. of oil and 9,000,000 feet of gas from a total depth of 2,961 feet. Darby Oil Co. and others' No. 2 Kaegi "B," SW cor. NE, Section 20-19-1w, made 2,000,000 feet of gas from 2,937-53 feet; total depth 3,437 feet. Simmons-Canary's No. 1 Krehbiel, SE cor. NW, Section 33-18-1w, was abandoned at 3,497 feet.

Rice County

Slick and others' No. 1 Orth, SE cor. NE, Section 27-18-10w, made 815 bbls. in 10 hours from 3,241-43 feet. Rogers and others' No. 3 Rainey, NE cor. NW SE, Section 3-21-6w, made 480 bbls. from chat 3,268-90 feet.

Reno County

Olsen and others' No. 1 Rudicel, C SW SW, Section 24-23-4w, made 465 bbls. in 18 hours from 3,340-74 feet.

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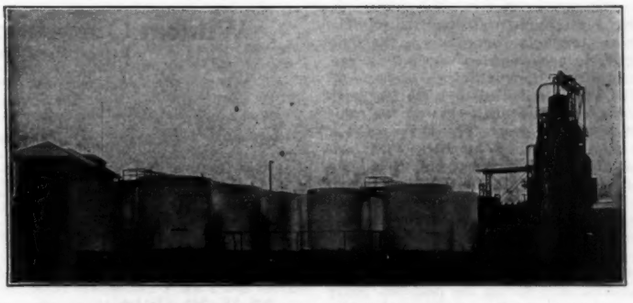

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Oil Show in Lamar County, Alabama, Wildcat; Various Estimates of Well in Mississippi

By J. R. CRUMPTON
Staff Correspondent, Louisiana-Arkansas

SHREVEPORT, La., Aug. 15.—A good show of oil encountered in a wildcat in Lamar County, Alabama, and results of further tests of the oil well on the southeastern flank of the Jackson gas field, Rankin County, Mississippi, are the operations sharing the interest of operators in this division during this week. Drilling activity in all of the districts, with the possible exception of the border counties of East Texas, continues to be on the increase, with North Louisiana leading the other areas in new wildcat operations.

Alabama

The Lamar County, Alabama, test, the DeSoto Oil & Gas Corp.'s No. 1 Gardner, Section 22-15s-16w, set 10-inch casing on top of the Paleozoics at 543 feet, and recently set 6⅝-inch casing at 2,617 feet. A bailing test at this depth showed some salt water and the casing was pulled and reset at 2,772 feet. The test hit the top of the pink shale at 3,067 feet and an oil sand with a good show at 3,125 feet. A small quantity of oil, gravity not determined at this writing, had been bailed from the hole when heaving of shale between the casing seat and the bottom stopped operations. Arrangements are going forward to clean the hole to the bottom, set liner and test. The latest and most encouraging reports state that some oil has been bailed from the test since the cave-in 60 feet off bottom, indicating a good pressure below the oil. The show is probably coming from the Pennington formation, Mississippian in age, on top of the Bangor lime.

The test was drilled to 1,565 feet with a rotary rig and changed over to cable tools from that depth. The DeSoto Oil & Gas Corp. is headed by Jesse P. Woodward of Columbus, Miss., and P. J. McAlpine, pioneer operator of that district, is the drilling contractor. The location was made by H. D. Easton, widely known geologist of Shreveport, La. Mr. Easton was the discovering geologist of the Zwolle Field in Sabine Parish, North Louisiana, and during the past few years has made an extensive study of the Alabama and Mississippi areas. The new wildcat is north of the central part of the state on the western border, a few miles east of the Mississippi state line. The Amory gas field in Monroe County, Mississippi, the first gas producing area uncovered in this state, is about 18 miles northwest.

Two other wildcats in Alabama, both in Mobile County south of the Lamar test, are being closely followed. The Ohio Oil Co.'s deep test, No. 1 James Bethel, Section 34-3s-2w, is drilling in shale at 5,500 feet and J. C. Prine's No. 1 M.&O. Railroad, Section 33-2n-4w, is drilling at 2,375 feet.

Mississippi

An attitude of interested watchfulness is being maintained on Henslee and others' No. 1 Warner, Section 14-5n-1e, on the southeastern flank of the Jackson Field, Rankin County. It is generally conceded to be a commercial well of low gravity oil, and further tests will confirm its open flow capacity and whether pressures by gas or salt water. The well has been shut in for the past week while earthen pits are being constructed for the production. Various estimates have been made of the well's potential open flow, after two short test periods, varying from 200 to 5,000 bbls. daily, with the general opinion prevailing that it will be good for a daily flow of at least 500 bbls. The question also arises as to whether the low grade oil will be marketable on the present market of overproduction, and tests are being made to determine the exact gravity and gasoline content. The operators of the well maintain that the oil is of higher gravity than that produced by the Gulf Refining Co.'s No. 1 Rainey, completed in 1930, and one-half mile to the northeast.

The Jackson Field reported one completion during the past week. Meredith & Smith's No. 3 Strawder, Section 12-5n-1e, in the Rankin County area, gauged 41,104,000 feet of dry gas from 2,376 feet. Three other wells in the field have set casing on top of the chalk and are ready to drill plug. Atkins and others' No. 1 Crane Lawrence, Section 36-6n-1e, Hinds County, has set 4½-inch at 2,485 feet, and in the same county, Ridgeway & McGehee's No. 2 Mosal, Section 24-6n-1e, has set 6⅝-inch at 2,486 feet. In Rankin County, on the east side of Pearl River, Ferguson-Fuller and others are drilling plug from 6⅝-inch at 2,369 feet in their No. 1 Ivey, Section 13-5n-1e. Only a small number of wildcats are active in Mississippi. In Lamar County, Stauffer & Kourl's No. 1 Bond, Section 18-2n-14w, is arranging to make a drill stem test with packer at 2,398 feet of a show of gas from sandy shale. The total depth of the hole is 2,424 feet. P. J. McAlpine's No. 1 Rye, Section 22-15s-17w, Monroe County, is drilling in hard sand at 1,478 feet. This test is about 6 miles west of the DeSoto Oil & Gas Corp.'s test in Lamar County, Alabama.

North Louisiana

The North Louisiana completions consisted of one oil well, one gas well and three dry holes. The Zwolle Field furnished the only oil well, J. H. Askew's (formerly F. G. Reid) No. 4-A McNeely, Section 14-7-11, in the southeastern part of the field, pumping 12 bbls. daily from 2,600 feet. This area reported a high percentage of dry holes. The Bridwell Oil & Gas Co.'s No. 1 Mrs. W. G. Billbray, Section 32-8-11, was dry and abandoned at 2,659 feet, and Lanier and others' No. 1 Steinhorst, Section 3-7-13, on the western flank was dry at 2,460 feet. Self & Kissick's No. 2 Moran, Section 1-7-11, in which was uncovered the original western extension, was dry and abandoned at 2,686 feet. Union Parish in the Monroe gas field reported Southern Carbon Co.'s No. 60 fee, Section 20-20-4e, as a completion, gauging 5,000,000 feet of dry gas and 610 pounds rock pressure from 2,149 feet.

A total of 10 new locations were reported for this district during the last seven-day period. Four of these were wildcats and six were in the proven areas of gas or oil. Avoyelles Parish in Central Louisiana reports T. J. Woodley, trustee, as having made a location for his No. 1 Thompson & Kolts in Section 11-2n-5e. The test will be in the center of a 30,000-acre block of leases, but no information is available on the contract depth. Near the town of Mansfield in DeSoto Parish, the Honeycutt Oil & Gas Co. has derrick up on its No. 1 Porter, Section 26-12-13. An old well in Natchitoches Parish, northeast of the town of Natchitoches, will be deepened. The Natchitoches Petroleum Co. is rigging up on its No. 1 Edenborn, Section 4-11-6w. The well was drilled in 1926 by J. F. Palmer and abandoned at 1,900 feet. In the Spring Ridge area, northern Sabine Parish, J. M. Bridges is moving in rig on his No. 1 Moore, Section 5-9-12.

Interest in deeper drilling in the parishes east of Shreveport continues as indicated by more blocks being assembled each week carrying drilling contracts to the 5,000-foot level. In Claiborne Parish, south of the Homer Field where pay comes from the Nacatoch around 1,400 feet and the Blossom around 2,000 feet, J. D. Houseman has assembled a block of 10,000 acres centering around Section 8-20-7. The contract calls for a 5,000-foot test to be started not later than February 1, 1933. Northeast of the Homer Field, the Leue Oil Co. is constructing a concrete cellar and runways under its No. 1 Kinder, Section 2-21-7. This well was temporarily abandoned in July of last year slightly below 3,500 feet. The company has since increased its holdings in the vicinity to around 20,000 acres and will make a 4,500-foot test or deeper if necessary to make a thorough test of the Trinity horizons. The 120-foot derrick is being repaired and braced and reserve mud pits and other extra equipment installed that will be necessary in making a deep test.

The Zwolle Field continues to show a steady increase each week in its drilling operations. The figures show that 25 wells in this area at this writing have 6-inch casing set on top of the chalk and are ready to drill plug. Ten wells are waiting on standard rig to pump with oil standing in the hole; five are rigging up; there are 23 locations and 22 derricks, and 32 wells are drilling between the surface casing seat and the top of the chalk, making a total of 117 operations in the field.

Wildcat Operations in Louisiana-Arkansas

(Rotary operations unless otherwise designated)

North Louisiana

AVOYELLES PARISH

Company, well, farm name, section and block—	Remarks:
T. J. Woodley, tr.'s No. 1 Thompson & Kolts, 2,640 ft. E, 200 ft. S, NW cor., Sec. 11-2n-5e	Location.

BEAUREGARD PARISH

DeRidder Development Co.'s No. 1 McMahan, 158 ft. S, 160 ft. W NE cor. NW, Sec. 32-2s-9w	S.D. 1,265 ft.

BIENVILLE PARISH

Blacklake Dev. Co.'s No. 1 Holstow, 600 ft. W, 100 ft. S, NE cor. SE SE, Sec. 17-15-6	S.D. for wtr. 2,674 ft.

BOSSIER PARISH

Breazelle & Steckoll's No. 1 Nattin, C SW NE, Sec. 15-22-14	Drlg. 1,525 ft.

CALDWELL PARISH

Carter Bell's No. 1 Taylor, 150 ft. S, 150 ft. E, NW cor. NE SE, Sec. 17-14-4	S.D. 3,712 ft.
Hudson et al's No. 1 Burton, Sec. 35-12-2e	S.D. 2,950 ft.

CATAHOULA PARISH

National Drlg. Co.'s No. 1 Marsh McMiller, 70 ft. N, 100 ft. W, C, Sec. 36-9-6	Abd. 3,097 ft.

CLAIBORNE PARISH

Leue Oil Co.'s No. 1 Kinder, Sec. 2-21-7	Rigging up on old well.
W. E. Rembert et al's No. 1 Hunt, 150 ft. N and E, SW cor. E half NE NE, Sec. 18-23-8	S.D. 1,071 ft.

DE SOTO PARISH

Coker et al's No. 1 Boone, 200 ft. N and W, SE cor. SW NW, Sec. 12-10-11	S.D. 60 ft.
Donley & Chastain's No. 1 H. Smith, 325 ft. W, 600 ft. N, SE cor., Sec. 31-14-15	S.D. 2,470 ft.
Honeycut O. & G. Co.'s No. 1 Porter, 423 ft. S, 414 ft. W, NE cor. NW NE, Sec. 26-12-13	Derrick.
S. A. Guy's No. 1 Dowling, 469 ft. E, 382 ft. S, NW cor. NE, Sec. 31-14-14	S.D. 2,970 ft.
E. T. Oakes' No. 1 R. H. Bryant et al, 200 ft. N and W, SE cor. NE NW, Sec. 30-13-15	S.D. 3,780 ft.
DeSoto Dev. Co.'s No. 1 Nickey, Sec. 7-13-12	Partly rigged up and S.D.
G. C. Smith et al's No. 1 Wolluma, 330 ft. N and W, SE cor. Sec. 30-12-12	S.D. 101 ft.
Walters-Nicholson, tr.'s No. 1 Jim Guy, Sec. 3-11-13	Coring 2,760 ft.

GRANT PARISH

Security Pet. Corp.'s No. 1 Swope est., Sec. 16-9-1e, 1,698 ft. N, 220 ft. E, SW cor. Sec.	W.O.S.R. 1,535 ft.
O. Robichaux's No. 1 T. M. Bradford, 1,870 ft. E, 314 ft. S, NW cor., Sec. 18-9n-1e	Derrick.

MOREHOUSE PARISH

Feazel & Kalil's No. 1 Davenport, Sec. 23-21-6e	Set 12-in. 119 ft.

NATCHITOCHES PARISH

W. M. Coates' No. 1 Ross Olive, Sec. 10-9-10, 660 ft. S and E from cen. of Sec.	S.D. 2,010 ft.
Dr. H. S. Gerson's No. 1 Smith, Sec. 11-10-8, 2,000 ft. N, NE cor. of irregular Sec. 10, in Sec. 11	T.A. 1,875 ft.
R. A. Keaton's No. 1 Bastrop State Bank, 200 ft. N and W, SE cor. NE NW, Sec. 17-10-6	Location.

(Continued on Page 72)

Daily Average Runs

The fields of North Louisiana and Arkansas declined 185 bbls. in the daily average runs during the past week. The daily average runs from the several pools were:

NORTH LOUISIANA

	Bbls.
Caddo light	3,010
Caddo heavy	1,885
Cotton Valley	760
DeSoto and Red River	1,950
Elm Grove	360
Haynesville	4,290
Holly	255
Homer	2,810
Pleasant Hill	280
Sarepta-Carterville	860
Urania	3,720
Zwolle	7,025
Total	29,205
Total previous week	29,335
Decrease	130

ARKANSAS

Champagnolle	1,745
El Dorado	3,065
Lisbon	440
Nevada	970
Smackover light	2,950
Smackover heavy	24,020
Stephens	620
Urbana	250
Total	34,060
Total previous week	34,115
Decrease	55
Total both states	63,265
Total previous week	63,450
Decrease	185

Two Tests of Importance in North Kettleman Hills May Cause the Revision of Existing Lines

By L. P. STOCKMAN
Staff Correspondent, California Fields

LOS ANGELES, Calif., Aug. 13.—The Continental Oil Co. definitely proved the existence of substantial production in the San Miguelito Field a few days ago when No. 1 Grubb was recompleted flowing 2,640 bbls. of clean 31 gravity oil and 2,000,000 feet of gas per day from 7,152 feet. This well, originally completed in the upper zone last November flowing 1,500 bbls. per day from 6,750 feet, was taken off production a month or so ago when production declinel almost to the vanishing point coincident with a substantial increase in the water cut.

Drilling operations were concluded last week at 7,197 feet but the lower 45 feet of the hole was plugged off when the bit passed out of oil sand into a shale formation. This cement plug was placed in the hole not because of any fear of hitting bottom water but rather because of a desire to develop the field zone by zone. Previous to recompleting No. 1 Grubb the Continental ran a water witch and located a water sand just below the shoe of the first water string and accordingly landed a second string of pipe. As a result of this operation the upper 100 feet of the second zone was cased off. A little lifficulty was experienced in cementing the last string and the company was obliged to perforate the pipe and squeeze in 30 sacks of cement. This did the job satisfactorily, however, and the well came in cutting 3 per cent but subsequently cleaned up in good shape.

A little over 400 feet of hole was cored in No. 1 Grubb and 80 per cent of the formation was the richest looking oil sand ever found in a California field. The oil just simply oozed out of the cores due to the high degree of saturation. Completion of this well by the Continental proves the San Miguelito Field as an area of high potential although in areal extent it will probably be rather limited due to the presence of a major fault in the northern part of the field which practically parallels the axis of the structure. The Continental Oil Co. and the Chanslor-Canfield Midway Oil Co. control approximately 90 per cent of the total productive acreage.

The San Miguelito Field is approximately midway between the prolific Ventura Avenue and the less productive Rincon Field. The Chanslor-Canfield Midway Oil Co. drilled the first test in the San Miguelito Field but this project was only a mediocre producer as it was completed pumping 150 bbls. per day. This well, No. 2 Hobson, was carried down to 10,034 feet and failing to find commercial production at this depth, was accordingly plugged back. A subsequent survey indicated that this well showed a deviation from the vertical of 2,410 feet and finally wound up on the other side of the fault which limits the northern end of the field. Neither No. 2 Hobson of the Chanslor-Canfield Midway Oil Co. nor No. 1 Grubb of the Continental are located near the apex of the structure with the result that subsequent drilling should result in the completion of fairly large producers.

All operators interested in this field are in sympathy with curtailment and are accordingly expected to retard both production and development activities. The acreage is all held in large blocks by reputable operators with the result that San Miguelito Field will be developed conservatively and slowly.

Excess Production

Crude oil production in California showed a decided increase during the past week and for one day, August 8, exceeded the current allotment of 475,600 bbls. per day. This excess occured in spite of the fact that operators in the Ventura Avenue Field produced approximately 9,000 bbls. per day below their maximum allowable. If this chronic overproduction continues it can only lead to disciplinary action by major buyers of crude oil. Marketers are quite anxious to maintain or improve existing prices of crude and refined oils but cannot hope to do so without sympathetic action on the part of producers. Refined oil prices appear to be weakening a little and if this situation becomes further aggravated marketers will have no alternative except to meet the new competitive scale. The end of the summer season is only about a month away, and, while Pacific Coast stocks will probably register a decline during July, August and September, it is a foregone conclusion that marketers will be reluctant to accumulate stocks during the coming winter. The reduction effected in stocks during July and the decrease expected to result during August and September can be attributed to offshore shipments, even though substantially below previous averages, and a higher attendance at the Olympic games than anticipated. Over 100,000 automobiles were checked in across the California State line within the past month, with the result that visitors to the Pacific Coast substantially increased domestic consumption. It might not be amiss to mention, however, that coastwise travel on state highways is still greatly below the normal rate.

Drilling Operations

Drilling operations throughout the State did not show any great change during the past month and there is nothing tangible at the present time to indicate any deviation from the existing rate. Unless something unforeseen develops during the next 30 or 60 days, drilling operations in California during the current year will be substantially below the lowest rate established within the past decade. Every field in the State, with the possible exception of Fruitvale, has shown a consistent decline during the past several months and while lease requirements will result in the drilling of a few new wells in the North Belridge Field, this development is more or less of a routine nature. Due to the enormous potential daily production built up at Kettleman Hills, operators in this field have reduced development work to a minimum. Unit development in the Kettleman North Dome Field has greatly reduced drilling operations and has rendered the field more susceptible of curtailment than would have prevailed under the old order when each new well called for one or more offsets. Operators in the Ventura Avenue Field have accomplished the same result due to the sympathetic appreciation of the problem confronting the industry by Ralph B. Lloyd and other lessors.

Fruitvale

There was no great change in the scope of drilling in the Fruitvale Field of Kern County during the past week and it appears probable that this field will continue to be relatively active during the next several months. There are several wells listed for early completion in this area but for each well completed there should be another started, with the result that the current average should be maintained for some time to come. The Cascade Oil Co. has just spudded in No. 1 Hasson and additional work will be started in the near future by the Sea Hawk Petroleum, Emerick Oil Corp., Gus de Bretteville, Kern Petroleum Corp. and the Mohawk Petroleum. The Western Gulf has dismantled the rig for No. 1 Schmidt and has cancelled the drilling permit for this project. This company should list two new wells, No. 2 Bittle and No. 3 Price-Stewart, for completion in the near future. The Petrol Producing Corp. ran into a little bottom water in No. 1 Saffel-Bloemer at 4,040 feet and has accordingly plugged back to 4,025 feet. This well, together with No. 1 Unruh of the Western States Petroleum, should both be early completions. The Mohawk Petroleum Co.'s well No. 11, H. L. Whiston's well No. 1 and the General Petroleum's No. 3 Hensley should also be given production tests in the near future. The Hay Petroleum Co. successfully completed No. 1 Swain during the early part of the week and this new well, bottomed at 3,681 feet and finished with a 4¼-inch liner carrying 210 feet of perforated, was brought in pumping 172 bbls. of relatively clean 22.3 gravity oil per day.

Kettleman Hills

The Kettleman North Dome Association's well No. 36-30 J, bottomed at 8,699 feet but plugged back to 8,504 feet, tested wet on a preliminary production test late this week and may possibly be indefinitely suspended. This well, located in Section 30-21-16, is situated between the blue and the red lines defining the inner and outer limits of production in the North Dome of Kettleman Hills and apparently establishes the outer limits of commercial production in this section of the field. The well in question is located a little more than one-half a mile due west of the Union Oil Co.'s No. 1 King and its failure to show commercial production confirms the original opinion of engineers that the extreme western end of the North Dome was about the only area which might subsequently be extended.

The Kettleman North Dome Association succeeded in extending the northern limits of production in the west end of the structure by completing well No. 58-20 J some time ago but Kenda's south extension, well No. 36-30 J, failed to result in commercial production, at least as far as the present productive Temblor is concerned. The two most important drilling projects under way in the western end of the field at the present time are the Standard's well No. 67-19 J and the North Kettleman Oil & Gas Co.'s No. 1 Lillis-Welch, the former being located in Section 19-21-17 and the latter in Section 24-21-16. The Standard's project is located between the blue and the red lines but No. 1 Lillis-Welch is located outside of the blue, or outer line, inclosing the maximum possibly productive acreage. If the Standard develops commercial production in well No. 67-19 J, it, together with Kenda's well No. 58-20 J, will necessitate a revision of the inner, or red line, inclosing the generally accepted proven acreage. If, on the other hand, No. 1 Lillis-Welch is completed as a commercial producer, it will necessitate a revision of both the blue and the red lines. Drilling operations indicate a definite plunge in the western end of the Kettleman North Dome Field, and, while the North Kettleman Oil & Gas Co.'s No. 1 Lillis-Welch looked like a good bet for production a few months ago it is not especially hot at the present time. The failure of Kenda's well No. 36-30 J to result in commercial production, and the relatively small production found in well No. 58-20 J, tends to indicate that the limits of commercial production are not very far distant. Because of the showings of these two wells, the outcome of work on the Standard's well No. 67-19 J will be watched with considerable interest as this well is located about midway between Kenda's No. 36-30 J and No. 58-20 J, although somewhat to the west.

Neither of the wells which have reached

TANKER SHIPMENTS FROM LOS ANGELES TO DOMESTIC AND FOREIGN PORTS

	July 30, 1932		July 23, 1932			
	Total this week	Daily average	Total last week	Daily average	This year to date	Same time last year
Intercoastal-domestic—						
Diesel and gas oil	.....	.....	71,988	10,284	219,058	1,094,502
Gasoline	309,390	44,199	258,576	36,939	5,273,037	8,458,856
Kerosene	.....	.....	.....	.....	154,372	157,589
Foreign exports—						
Crude oil	68,304	9,758	193,619	26,231	5,015,573	4,509,482
Fuel oil	157,807	22,544	272,653	38,950	5,246,629	8,618,824
Diesel and gas oil	29,757	4,251	33,854	4,836	1,464,912	2,307,907
Gasoline	.....	.....	195,963	27,995	5,246,345	5,464,277
Kerosene	.....	.....	17,184	2,455	1,439,301	1,044,210
Lubricants	.....	.....	.....	.....	.....	36,353
Naphtha distillates	.....	.....	.....	.....	120,075	.....
Coastwise-domestic—						
Crude oil	252,310	36,044	266,714	38,102	8,483,978	13,120,926
Fuel oil	127,749	18,250	252,568	36,073	7,223,248	7,775,597
Diesel and gas oil	34,053	4,865	.....	.....	761,010	912,474
Gasoline	258,325	36,904	177,093	25,299	8,938,389	8,294,503
Kerosene	3,847	550	.....	.....	102,396	206,242
Naphtha distillates	.....	.....	.....	.....	.....	4,952

TANKER SHIPMENTS FROM SAN FRANCISCO TO DOMESTIC AND FOREIGN PORTS

Intercoastal-domestic—						
Diesel and gas oil	.....	.....	70,966	10,138	302,136	.....
Gasoline	.....	.....	67,771	9,682	497,956	474,389
Lubricants	.....	.....	8,005	1,144	23,829	27,306
Foreign exports—						
Crude oil	.....	.....	.....	.....	707,651	107,736
Fuel oil	.....	.....	.....	.....	582,109	812,293
Diesel and gas oil	.....	.....	.....	.....	425,682	294,708
Gasoline	70,076	10,011	.....	.....	2,159,207	2,695,205
Kerosene	10,140	1,449	96,080	13,726	741,760	540,188
Lubricants	.....	.....	.....	.....	24,934	.....
Naphtha distillates	.....	.....	.....	.....	.....	20,100
Coastwise-domestic—						
Fuel oil	.....	.....	110,262	15,766	1,730,732	2,520,381
Diesel and gas oil	.....	.....	.....	.....	238,094	278,159
Gasoline	164,390	22,484	57,159	8,166	2,128,614	2,242,242
Kerosene	8,400	1,200	6,311	902	80,467	203,286
Naphtha distillates	.....	.....	.....	.....	.....	49,780

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CLASSIFIED DEPARTMENT

the oil sand in the Middle Dome made much headway in recovering from the mechanical trouble which has been holding up progress during the past week. No. 1 Burbank of the Petroleum Securities has been showing an increasing quantity of natural gas during the past several weeks, but this hole appears to be in an almost hopeless condition from a mechanical standpoint, with the result that the gas is more of a handicap than a good omen. The Standard's well No. 6-29 V is still held up with a fishing job at 8,406 feet and consequently no footage was made during the week. This well, an offset to No. 1 Burbank of the Petroleum Securities, has been delayed for the past several weeks with mechanical trouble. On the Bunting property, the Universal Consolidated is rotating ahead in well No. 1 at 5,510 feet but it will be another month or so before this well reaches the top of the pay.

Lost Hills-Belridge

The Continental Oil Co. is rigging up No. 3 Result, a new well in the North Belridge Field of Kern County, and this project should begin making hole some time within the next week or 10 days. The Ohio re-entered No. 1 Bloemer after a suspension of more than a year and is cleaning out the hole at 5,000 feet preparatory to a resumption of drilling at 5,986 feet. This well, which failed to find commercial production in the productive Temblor, will be deepened in the hope of picking up the deep zone found by the Belridge Oil Co. a few months ago. The new work getting under way in the North Belridge Field is due to lease requirements and does not indicate any intention on the part of operators to engage in competitive drilling. As a matter of fact, operators in the North Belridge Field have indicated a commendable appreciation of the difficulties confronting marketers and are consequently abiding by the curtailment program. None of the operators in the Lost Hills Field have shown any evidence of engaging in deep zone exploration, with the result that this field is relatively quiet.

Ventura Avenue

Drilling operations in the Ventura Avenue Field have reached the lowest level in years and while several new wells are scheduled to be started in the near future, even this additional work will leave drilling subnormal. The Associated is making preparations to start two new wells on the Ventura Land & Water Co. property and the bit in these projects should begin making hole some time within the next two or three weeks. The General Petroleum is rigging up rotary equipment in No. 15-A Barnard, which will be carried on down for completion in the deep 57 zone discovered by the Associated Oil Co. last year. The Shell is rigging up No. 74 Taylor, a new well, and drilling operations are expected to get under way within the next few days. Crude oil production in the Ventura Avenue Field has reflected an abnormal degree of curtailment during the past several months and while operators will be afforded a little relief during the coming winter months due to increased consumption of natural gas, daily average production for the year will probably be below the maximum established allowable. There is only one drilling well under way in the Elwood Field at the present time and no further additional development is anticipated for the present. The field's lone driller is well No. 6 on Tideland permit No. 92, held by Caroline Spalding and being developed by the Pacific Western Oil Co. This project is rotating ahead at 2,800 feet and should consequently be completed within the next 15 days. In the Santa Maria district, the Union Oil Co. is rotating ahead in No. 51 Newlove at 3,180 feet and will probably complete it shortly.

Carpinteria

The Casitas Oil Co. has completed preparations to start work on its well No. 1 on State tideland permit No. 202 in the Carpinteria area and construction of a 450-foot pier should get under way in the near future. In the Coal Oil Point area, located a few miles east of the Ventura Avenue Field, the Bolsa Chica is redrilling a little below the 3,000-foot level in well No. 1 on State tideland permit No. 191. The Equity Oil & Royalty Co. successfully recovered from the fishing job which has been holding up progress during the past few weeks and is cleaning out well No. 1 on State tideland permit No. 159 preparatory to a resumption of drilling at 3,326 feet. The Barnsdall found a little water in No. 1 Careaga, a wildcat in the Los Alamos section of Santa Barbara County, and further work will be required before conclusion of a satisfactory production test. This well, bottomed at 5,331 feet and cleaned out to 4,295 feet, showed water and a little 25 gravity oil during a preliminary test but did not show a natural flow as the hole had bridged over at approximately 3,400 feet. After being cleaned out, the company conducted a water test, at the conclusion of which it was the consensus of opinion that water was entering the hole at approximately 3,300 feet. The Western Seaboard Oil Co. is rigging up its well No. 1 in the Naples section of Santa Barbara County and will resume drilling at 5,134 feet. This well has been standing suspended for several months and while a deeper test is entirely justified, the outlook for substantial production is not any too promising. In the Capitan area, the Oakburn Oil Co. resumed work on well No. 1, located on State tideland permit No. 169, and is redrilling at 2,600 feet, approximately 200 feet off bottom. The Western Gulf has recovered the fishing string which was lost in No. 1 Bradley, a deep test in the Santa Maria district, a few weeks ago. The company has not yet recovered the total amount of drill pipe lost in this hole, however, with the result that no footage has been made since the twist off occurred. On Santa Rosa, located off the coast of Santa Barbara County, the Standard has reached a depth of 2,450 feet in its initial test in this area.

Inglewood

Although deep drilling around the edge of the Inglewood Field has not yet been productive of satisfactory results, these outposts should not be condemned as none of them have been carried down to a depth sufficiently deep enough to thoroughly test out the lowest zones in the field. The Baldwin Oil Co.'s No. 9 Brownmoor is rotating ahead at 4,371 feet, but this hole was require additional footage before anything can be anticipated. W. A. Kyle's well No. 5 was wet on a test at 4,318 feet and preparations are under way to retest the water shutoff before making another cement job. The Pacific Western Oil Co. is expected to complete No. 16 Rubel in the Inglewood Field in the near future, although this project may possibly be carried on down into the second zone for completion. If finished in the second horizon, it will be shut in until such time as this zone is opened up for development. As a precautionary measure and to eliminate any necessity of deep zone development in this field, the Shell Oil Co. recently plugged back No. 9 Rindge to 2,848 feet. This well, which is located in close proximity to the Inglewood fault, is thought to have been unintentionally completed in the second zone several years ago. Its exact status has been somewhat of a mystery, although the preponderance of evidence tends to indicate that the well drilled through the first zone and was ultimately completed in the second horizon. In order to remove any doubt, the Shell cemented off the lower portion of the hole some time ago.

Dominguez

The Republic Petroleum failed to develop commercial production in No. 1 Childs, an outpost in the Dominguez Field of Los Angeles Basin at 6,094 feet, and this well has been plugged back by stages and alternately tested with negative results up to 5,800 feet. A water witch is being run to determine the point at which water is entering the hole in order that corrective work may be undertaken if possible. This lease was originally held by the Shell Oil Co. but was subsequently

quitclaimed because of the inability to develop commercial production. The Republic Petroleum leased this property within a short time after it was quitclaimed as officials were of the opinion that clean oil might be produced if extreme care was exercised in cementing off the intermediate water sands. The Republic Petroleum drilled this test knowing that the odds were against the development of commercial production but realizing, at the same time, that small but commercial production might possibly be developed.

In the Potrero Field of Los Angeles Basin, the Wilshire Annex Oil Co. is running a whipstock in well No. 3 on the Potrero Country Club property, where the company recently finished a 975-bbl. well, and an attempt will be made to divert this hole from its present course. Well No. 1 on the Potrero Country club property has been plugged back from 5,283 feet to 3,590 feet and an attempt will be made to recomplete it in the upper zone. The Wilshire is also running another whipstock in No. 1 Neace, bottomed at 6,430 feet with an 8⅝-inch water string landed at 6,130 feet. The Standard, with two drilling wells on the Murphy property in the West Coyote Field, has started rig construction for another new project on the Emery lease and the bit in this well, No. 52, should begin making hole within the next 10 days.

Playa Del Rey

Although development work is a thing of the past, as far as the Playa Del Rey Field of Los Angeles Basin is concerned, several operators are engaged in reconditioning a number of wells in an effort to stimulate production. The water problem is becoming rather acute around the edge of the field and this factor, together with a rather high cut shown by several wells near the top of the structure, indicates the probability that the Playa Del Rey Field will become a rather negligible factor within the next year. Crude oil production in this field ceased to be of any consequence over a year ago, although this crude has been a rather disturbing factor in the refined oil market. This is attributed to the failure of operators to observe curtailment in the past and while the field is only producing approximately 900 bbls. per day above its allotment at the present time, it is still exerting a rather unfavorable effect from a marketing standpoint.

Long Beach

The Hancock Oil Co. successfully recompleted its No. 22 in the Long Beach Field of Los Angeles Basin during the early part of the week and this project was returned to production pumping 498 bbls. of relatively clean 26.3 gravity oil per day. This well, bottomed at 7,132 feet with an 8⅝-inch water string landed and cemented at 5,251 feet, was plugged back to 5,100 feet and the 8⅝-inch perforated from 4,500 to 4,850 feet. There are still quite a number of wells being reconditioned in the Long Beach Field and we may therefore contemplate additional completions from time to time. The development of substantial production will be the exception rather than the rule, however, as this field is rather well depleted due to overdevelopment. It is rather interesting to note that the average daily well production of producers in the Long Beach Field is well below 100 bbls. per day. During the middle of the current week, this field was producing 68,100 bbls. per day from 957 wells. The large number of producing wells in this field makes it rather difficult for Umpire Pemberton to bring field production below the maximum allowable for the simple reason that if each well produces a few barrels over the allowable, the aggregate excess runs into a rather high figure. Petroleum engineers predicted several months ago that Long Beach would cease to be a troublesome factor after July 1, but this optimistic opinion hardly seems justified and will not become a reality for some time to come. The extensive thickness of oil sand in the Long Beach Field is synonomous with long-lived production and while producing wells must of necessity register a consistent decline, the production curve in most cases has flattened out to such an extent that it is practically horizontal. There will of course be a normal decline in all wells on production but operators have arrested the aggregate decline from time to time by either cleaning out and reconditioning producers or by changing the source of production from either the upper to the lower zone, or vice versa.

Gulf Coast Fields

(Continued from Page 50)

ciger Oil & Gas Co. of its No. 1 W. C. Hunt, W. Coirson Survey, east of Pledger (Matagorda County) in Brazoria County. The prospect was checked geophysically several years ago and recently was rechecked and arrangements made for the drilling. Hamill & Smith have the contract to drill the first test. The block recently was taken over by Danciger Oil & Gas Co. from the group which has the geophysical work done.

Cheek Prospect

A second deep test has been started by Jack Schultz and associates on the Cheek geophysical prospect in central Jefferson County. This test, No. 2 Todd, William Carr Survey, is 1,800 feet to the south of the first, which was abandoned over a month ago as dry at 6,906 feet. Since then some thorough reflection shooting has been done by these operators.

PROTEST FURNACE OIL TAX

CHATHAM, Ontario, Aug. 7.—Representatives of oil refiners and distributors and manufacturers of oil furnaces waited this week on Hon. G. S. Henry, premier of Ontario, to protest against enforcement of the fuel oil tax enacted at the last session of the legislature. The enactment provided for a tax of one-half cent a gallon on all fuel oil consumed in Ontario, in addition to providing for licensing of vendors and the keeping of records by vendors and consumers. Owing to objections at the time, the government has not yet proclaimed the act in force, and according to Premier Henry, no decision has yet been reached in the matter.

FAYETTE, MO., FRANCHISE

The city council of Fayette, Mo., has called a special election for Tuesday, August 29, on granting a 20-year franchise to the Central States Utilities Co., of Columbus, Ohio, for the construction and operation of a natural gas distributing system.

The council's action, coming after two years of agitation of the natural gas franchise question, followed council's invitation at its June meeting, asking utility companies operating in the territory to submit franchise proposals. The Central States company recently completed construction of a system at Palmyra.

NEW PRODUCT AT CALGARY

CHATHAM, Ontario, Aug. 6.—The Imperial Oil, Ltd., refinery at East Calgary late in July commenced production of the company's new 3-Star brand gasoline, distribution through the Imperial selling system being commenced simultaneously. The brand was first introduced in eastern Canada last September.

REPORT ON OIL BUNKERING

The result of a survey of oil bunkering facilities at the ports of Seattle, Tacoma, Everett, Bellingham and Grays Harbor, Wash., is given in a report just issued by the corps of engineers, United States Army, and the Bureau of Operations, United States Shipping Board.

Oklahoma Fields

(Continued from Page 55)

6-4, made 75 bbls. from 2,893–2,994 feet, total depth 2,897 feet.

Seminole County

Davey & Maens' No. 1 Harjo, NE cor. SE NW, Section 11-6-6, is a rig. Stanolind Oil & Gas Co.'s No. 3 Jones, SE cor. NW, Section 20-9-6, is rigging. Ute Oil Co.'s No. 1 Combs, SW cor. NW SE, Section 18-10-7, was abandoned at 3,448 feet.

Stephens County

Willie's No. 1 Cates, SE cor. NW SW, Section 15-1-8w, is a rig. Parry and others' No. 1 McPhail, SE cor. NW SW SW, Section 14-2-7w, is a rig. Ruyle and others' No. 1 Dameron, SW cor. NE SE NW, Section 1-2s-8w, is a rig. G. Pace's No. 1 A. Watkins, NW cor. SE SW, Section 22-2s-7w, was abandoned at 1,807 feet. Same operator's No. 1 Watkins "A," SW cor. NW NE SW, Section 22-2s-7w, was abandoned at 1,987 feet.

Wagoner County

R. K. Marrs' No. 2 Snake, SW cor. NE NW, Section 26-18-15, made 10 bbls. from 1,017-28 feet, after a 60-quart shot. Sheridan Oil Co.'s No. 3 Snake, C SE NW, Section 26-18-15, made 70 bbls. from 1,020-71 feet.

RUSHING SHELL PLANT

NEW YORK, Aug. 13.—Shell Oil Co. of Canada, subsidiary of Shell Union Oil Corp., is rushing work on construction of its new refinery at Montreal, with operations on a 24-hour basis, according to reports reaching here. It is planned to complete the plant before winter.

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Hines Pet., No. 1 Ocean Park, Los Angeles Co.	9- 2-15	7,414	suspended
Taylor Oil Co., No. 1 Culver, Los Angeles Co.	12- 2-15	6,238	suspended
Co-operative Dev. Co., No. 1 Del Rey, Los Angeles Co.	26- 2-15	4,361	sd. sh. drilling
Hogan, N. S., No. 1 Hawthorne, Los Angeles Co.	23- 3-14	101	suspended
Lawndale Pioneers, Inc., No. 1 Peck, Los Angeles Co.	20- 3-14	6,378	suspended
Baldwin Oil Co., No. 9 Inglewood, Los Angeles Co.	7- 2-14	4,371	sd. sh. drilling
Baldwin Hills Synd., No. 1 Inglewood, Los Angeles Co.	17- 2-14	4,090	suspended
Kyle, W. A., No. 1 Inglewood, Los Angeles Co.	7- 2-14	4,318	recemented
Pacific Western, No. 16 Inglewood, Los Angeles Co.	8- 2-14	2,570	cleaning out
El Dorado Oil Co., No. 1 Puente, Los Angeles Co.	30- 2- 9	2,860	suspended
Jones, W. L., No. 1 Bell, Los Angeles Co.	31- 2-12	1,593	suspended
Weist Oil Co., No. 1 Montebello, Los Angeles Co.	34- 1-11	4,902	suspended
Blinn & Gray, No. 1 Montebello, Los Angeles Co.	6- 2-11	5,060	suspended
McNeil, A. W., No. 1 Montebello, Los Angeles Co.	7- 2-11	rig	suspended
Wardell & Menichini, No. 1 Montebello, Los Angeles Co.	7- 2-11	304	abandoning
Yellowstone Oil Co., No. 1 Alhambra, Los Angeles Co.	24- 1-13	3,919	suspended
Caballero Estates, No. 1 Calabasas, Los Angeles Co.	23- 1-16	1,604	suspended
Marble, Willard, No. 1 Chatsworth, Los Angeles Co.	6- 2-16	1,395	suspended
Ball, W. T., No. 1 Newhall, Los Angeles Co.	34- 3-16	2,540	sd. sh. drilling
Ajax Pet., No. 1 Newport, Orange Co.	21- 6-10	7,259	suspended
Nuoil Co., No. 1 Newport, Orange Co.	29- 6-10	1,970	suspended
Mineral Exploration, No. 1 Capistrano, Orange Co.	8- 8- 7	887	sd. sh. drilling
Orangethorpe Pet., No. 1 Brea, Orange Co.	32- 3-10	4,264	sd. sh. drilling
Spindletop Oil Co., No. 1 Salton Sea, Riverside Co.	25- 7-10	3,590	suspended
Duncan, N. L., No. 1 Sagebrush, Riverside Co.	8- 4- 6	1,157	suspended
Colan Dev. Co., No. 1 Redlands, San Bernardino Co.	25- 1- 2	2,392	suspended
Great American Pet., No. 1 Chino, San Bernardino Co.	18- 2- 8	....	material
Mason Oil Co., No. 1 Salton Sea, Imperial Co.	1-17-15	674	sd. sh. drilling
Woods, D. H., No. 1 Salton Sea, Imperial Co.	7-11-16	766	sd. sh. drilling
Borderland Oil Co., No. 2 Encinitas, San Diego Co.	29-16- 4	2,677	suspended
South Bay Oil Co., No. 1 Border, San Diego Co.	31-18- 2	1,243	suspended
Shannon, G. H., No. 1 Kearney, San Diego Co.	14-15- 3	446	suspended

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Standard, No. 1 Santa Rosa Island, Santa Barbara Co.	unsurveyed	2,450	bl. sh. drilling
Barnsdall, No. 1 Los Alamos, Santa Barbara Co.	31- 8-33	5,331	testing
Western Gulf, No. 1 Santa Maria, Santa Barbara Co.	5- 9-33	10,294	fishing D./P.
Wilson, N. S., No. 1 Los Alamos, Santa Barbara Co.	2- 7-35	4,979	suspended
Equity Oil Co., No. 1 Coal Oil Point, Santa Barbara Co.	24- 4-29	3,326	cleaning out
Bolsa Chica, No. 1 Coal Oil Point, Santa Barbara Co.	25- 4-29	5,510	redrilling
Western Seaboard, No. 1 Naples, Santa Barbara Co.	7- 4-29	5,134	cleaning out
Oakburn Oil Co., No. 1 Capitan, Santa Barbara Co.	tideland	2,821	resume work
Pacific Western, No. 1 Gibraltar, Santa Barbara Co.	14- 5-27	2,345	suspended
Casitas Oil Co., No. 1 Carpinteria, Santa Barbara Co.	tideland	....	location
Associated, No. 1 Rincon Creek, Ventura Co.	19- 4-24	2,080	suspended
Woodrow Pet., No. 1 San Miguelito, Ventura Co.	4- 3-24	3,660	sd. sh. drilling
Continental, No. 1 San Miguelito, Ventura Co.	23- 3-24	7,196	plug 7,145 ft.
Miller, J. W., No. 1 Miguelito, Ventura Co.	23- 3-24	....	material
Bell, H. H., No. 1 South Mountain, Ventura Co.	22- 3-21	2,484	may deepen
Wilshire Oil Co., No. 1 Sulphur Mountain, Ventura Co.	20- 4-21	....	material
Superior Oil Co., No. 1 Timber Canyon, Ventura Co.	13- 4-21	2,593	sd. sh. drilling
Magu Synd., No. 1 Oxnard, Ventura Co.	17- 1-25	5,812	suspended
American Oil Co., No. 1 Conejo, Ventura Co.	33- 2-20	2,050	cleaning out
Wilshire Oil Co., No. 1-A Buttonwillow, Kern Co.	7-29-24	7,000	suspended
Milham Expl. Co., No. 17 Buttonwillow, Kern Co.	17-28-23	2,712	testing
Purman, T. H., No. 1 McKittrick, Kern Co.	22-29-21	4,610	suspended
Welport Oil Co., No. 2 McKittrick, Kern Co.	19-29-21	460	gr. sd. drilling
General Pet., No. 1 Belridge, Kern Co.	30-28-21	8,260	suspended
Wallace, K. C., No. 1 Belridge, Kern Co.	32-29-21	4,222	suspended
Rio Cal Pet., No. 1 Shale Hills, Kern Co.	2-27-18	2,355	suspended
Cumberland Oil Co., No. 2 Devils Den, Kern Co.	17-26-18	3,225	suspended
Hollaway, A. S., No. 1 Devils Den, Kern Co.	11-25-18	102	sd. drilling
Hannah, Tom, No. 1 Devils Den, Kern Co.	25-25-18	3,516	cleaning out
Pyramid Hills Oil Co., No. 1 Devils Den, Kern Co.	24-25-18	1,724	cemented
Fowler, F., No. 1 Blackwell Corner, Kern Co.	15-26-19	3,170	hd. sd. drilling
Regina Oil Corp., No. 1 Mojave, Kern Co.	26-10-14	3,148	hd. sd. drilling
Meridian Oil Co., No. 1 Mojave, Kern Co.	11- 9-15	4,000	suspended
Harding, J. B., No. 1 Mojave, Kern Co.	5-10-10	1,030	redrilling
Ritchie, J. J., No. 1 Tejon, Kern Co.	33-11-19	6,025	suspended
Descanso Oil Co., No. 1 Tejon, Kern Co.	31-11-19	2,749	suspended
Kingsburg Expl. Co., No. 1 Kingsburg, Fresno Co.	30-16-22	2,970	suspended
Kent & McDonald, No. 1 Carrizo Plains, San Luis Obispo	3-32-22	2,693	redrilling
Emerich Oil Co., No. 1 Carrizo Plains, San Luis Obispo Co.	22-32-22	1,981	redrilling
Trav-El Oil Co., No. 1 Carrizo Plains, San Luis Obispo Co.	7-32-22	2,450	suspended
Indian Dome Oil Co., No. 1 Edna, San Luis Obispo Co.	26-31-12	3,352	suspended
Martin, J. D., No. 3 Edna, San Luis Obispo Co.	5-31-13	311	suspended
Paso Robles, Oil Co., No. 1 Edna, San Luis Obispo Co.	27-27-11	4,191	suspended
Schilling, C., No. 1 Atascadero, San Luis Obispo Co.	1-29-12	1,650	suspended
Shell, No. 1 San Miguel, San Luis Obispo Co.	4-25-12	rig	rigging up
Pacific Inland, well No. 1, Monterey Co.	19-23-15	2,410	cemented
Brown, W. F., No. 1 Parkfield, Monterey Co.	15-23-14	1,051	suspended
Thomas Pet. Co., No. 1 Parkfield, Monterey Co.	31-22-14	161	sd. drilling
Guess, E. B., No. 1 Corcoran, Kings Co.	7-21-21	6,197	suspended
Woodward, Glen, No. 1 Dudley Ridge, Kings Co.	32-22-20	569	suspended
Scott Bros. Drlg. Co., No. 1 Dudley Ridge, Kings Co.	18-22-19	1,843	suspended
Lacal Natural Gas Co., No. 1 Dudley Ridge, Kings Co.	32-22-20	341	suspended
Kettleman Natural Gas Co., No. 1 Dudley Ridge, Kings Co.	18-22-19	1,100	suspended
Irma Investment Co., No. 2 Dudley Ridge, Kings Co.	7-23-20	1,224	suspended
Triune Oil Co., No. 1 Dudley Ridge, Kings Co.	5-23-20	471	sd. sh. drilling
Dudley Dome Oil Co., No. 1 Dudley Ridge, Kings Co.	9-23-20	rig	suspended
Eagle Oil Co., No. 2 Dudley Ridge, Kings Co.	15-23-20	1,342	suspended
Knudsen & Schmidt, No. 1 Reef Ridge, Kings Co.	36-23-17	5,694	fishing
Kettleman Ridge Oil Co., No. 1 Avenal, Kings Co.	10-23-16	1,148	cleaning out
Mid-California Oil Co., No. 1 Avenal, Kings Co.	11-23-16	....	grade
Magee & Stone, No. 1 Alpaugh, Kings Co.	34-24-22	5,060	suspended
Guess, E. B., No. 3 Dudley Ridge, Kings Co.	12-23-22	1,840	suspended
Ducor Pet. Co., No. 1 Ducor, Tulare Co.	14-24-27	2,200	suspended
Inland Valley Oil Co., No. 1 Visalia, Tulare Co.	24-17-24	2,092	suspended
Sheldon & Gholson, No. 1 Porterville, Tulare Co.	34-22-27	640	sd. sh. drilling
Hayman Oil Co., No. 1 Porterville, Tulare Co.	11-23-28	380	sd. sh. drilling
Gravity Expl. Co., No. 1 Alpaugh, Tulare Co.	11-24-23	2,207	suspended
Ellis & Sanford, No. 1 Tulare Lake, Tulare Co.	20-24-23	1,490	suspended
Napa Oil Co., No. 1 Griffith, Napa Co.	7- 8- 3	3,053	sd. sh. drilling
Oakdale Oil Co., No. 1 Oakdale, Stanislaus Co.	3- 2-10	4,798	sd. sh. drilling
Hilderbrandt, R., No. 1 Crows Landing, Stanislaus Co.	36- 6- 7	1,130	suspended
Rushing Oil Co., No. 1 Waterford, Stanislaus Co.	20- 3-13	2,630	sd. sh. drilling
Pacific Northern Oil Co., No. 1 Guinda, Yolo Co.	23-12- 3	3,045	suspended
Easton & Monell, No. 1 Colma, San Mateo Co.	25- 3- 6	3,130	suspended

May Open Another North Duval County Pool; Important Wildcat in San Patricio County

By B. D. STEVENSON
Staff Correspondent, Southwest Texas Fields

SAN ANTONIO, Tex., Aug. 15.—Buchanan & Frates' No. 1 Hagist, 8 miles north and 2 miles east of the North Government Wells Field in Duval County, set casing after getting the sand with show of oil that is producing in the Government Wells pools. It looks like the opening of another north Duval County pool. It got the sands quite a little shallower than in the Government Wells pools as it is a little farther to the northwest from the Reynosa Escarpment and up the dip. With an elevation of 466 feet it topped the Cole sand at 1,449 feet, got a gas sand at 2,110-22 feet that tested 300 pounds in three minutes then a break of 12 feet of shale carrying it to 2,134 feet and then 10 feet of sand showing oil from 2,134-44 feet. The upper sand carrying gas and the lower sand showing oil corresponds to conditions in the Government Wells pools and the sands are undoubtedly the same. It was to be drilled in some time early this week.

Late in the week reports were anxiously waited on Petroleum Finance's No. 1 Hahl at the south end of the North Government Wells Field which will extend the field a half mile if it makes a well. Also at the north end no completion report was yet in regarding Byrd's No. 1 Wright which had plugged back to make a gas well in the first sand. The only completion for the week was San Diego Oil Corp.'s No. 1 L. Bennett which is an inside location and came in for 50 bbls. an hour with total depth 2,307 feet.

In the Sarnosa Pool at the south end of the district, Thomas & Tarver, Inc.'s No. 1 Duval County Ranch Co. tested for a big gas well at 2,363-74 feet which is 4 feet higher than Hynes & Nessly's No. 1 Weil, an oil well which it offsets on the west. It was drilled to 2,450 feet and is shut down waiting orders. It seems to mark the west border of oil production and the eastern border of gas production and in connection with the Smith & Capps discovery gas well which is a half mile due north of it seems to help outline the field.

Sun Oil Co. was moving in late in the week to drill No. 2 Cuellar (Cano), a northeast offset to Thomas & Tarver and due north of Hynes & Nessly.

In the north end of the Sarnosa Pool The Texas Company's No. 2-A Duval County Ranch Co. has a sand at 2,433-38 feet and was making a drill stem test. This company's No. 2 Ruiz in the eastern point of Survey 127 located 1¼ miles east of production in Sarnosa and the same distance south of production in the South Government Wells Pool, is dry and abandoned at 2,810 feet. It was evidently drilled on the theory that the south extension would extend south. The trend of all these pools is north and south and they are not more than three or four locations wide with the exception of the North Government Wells Pool which has spread out considerably more. Quite a number of tests in the North Government Wells Pool are due to come in over the week-end but with one exception they are all inside locations.

Proration is not entirely settled yet in the Government Wells district. Orders were issued as reported last week and Magnolia was supposed to take half of the allowable but the understanding is this week Magnolia will take 150 bbls. per well. The orders were issued on a basis of a flat 40 bbls. per well and additional allowance for each acre in the block with a well. The effort was to limit the wells to one to 10 acres and some wanted them limited to one to 20 acres so as to cut down the cost of developing the pool.

Under the commission's order one well on a 20-acre tract is allowed to run 260 bbls. per day but two wells, each on a 10-acre tract would be allowed to run 150 bbls. each or a total of 300 bbls.; only 40 bbls. more per day and the idea of some operators is there would be more profit in limiting the development to one well to 20 acres.

Pettus District

Things have not moved rapidly in the new Tuleta Field in Bee County and the new tests did not get supdded in until the middle of the week. They should have the sand the coming week. The Texas Company is offsetting the discovery well on the west, Coquat & Hawn are drilling in the middle of the 10 acres next south of that on which the discovery well is located, and O'Neil and C.R.M. Drilling Co. in the middle of the 10-acre tract next east of the discovery well. These are the only tests that have spudded in and been started thus far. There are some other deals forming but they have not been started.

This field has been prorated to 200 bbls. per well and gas limited to 2,000 feet per barrel of fluid, but there has been some objection to the orders and a hearing is being held in Austin before the Railroad Commission relative to the field and the regulations.

The west extension to the Pettus Field reached its northern limits this week. Slick-Seeligson, Inc.'s No. 7 Ray and The Texas Company's No. 6 Gremmell, offsets, and each located 400 feet north of a producer, are checked as failures. Slick-Seeligson got a sand at 3,930-40 feet but it was dry. No. 6 Ray, 400 feet south of it, topped a sand and got oil production at 3,876 feet and the elevations are about the same.

In the North Pettus Pool, a pool of three producers brought in a couple of years ago, the Gulf Coast Oil Co.'s No. 3 R. A. McKinney had better luck and has set casing to test a sand at 3,662-70 feet without waiting to make a drill stem test. The depth is about the same as that of Nos. 1 and 2 McKinney, one of which is a gas well and the other an oil well.

San Patricio County

John F. Camps No. 1 Bennett, in northern San Patricio County, is one of the most important looking wildcats at this time. It has a sand at 4,567-94 feet which on drill stem test showed 200 pounds in two minutes and sprayed some oil. Arrangements were being made to set casing late in the week and when casing is set it will probably be allowed a full 10 days which is the custom in the coast counties.

This wildcat is about 20 miles southwest of the Refugio Field and the same distance northeast of the Agua Dulce Field, these being the nearest important pools. The well is about on the same general trend with the McFadden and Keeran Fields in Victoria with the Refugio Field. Victoria Oil Corp.'s No. 2 Keeran at 5,841-51 feet came in for a big oil well the past week.

Balcones Fault Zone

Surveys are being made for an outlet for the production of C. J. Webster Oil & Gas Co.'s No. 1-A McCrory in Caldwell County which is now estimated at 300 bbls. of oil daily. It is shut in waiting disposition of the oil. If a line is built to loading rack at Dale the crude will be shipped to a North Texas independent refinery via the Katy Railroad and if a line is built to connection with the Grayburg pipe line on the west the crude will be run to an independent refinery in San Antonio.

In the Dunlap Field in western Caldwell County, Bob Rose's No. 1-B Walker was put on the pump and pumped 150 bbls. a day and then headed up and started flowing, later mudding up and had to be cleaned out. It seems sure to make a good well.

In the Sal-Mar district in Guadalupe County some new tests are being started and some of those that stopped dry in the Austin chalk are to be carried to the Edwards lime. An effort is being made to plug back No. 1 Pfullman which had a break in the Georgetown and is thought possibly to be a crevice well. It drilled on to the Edwards lime and 30 feet into the Edwards and got water but considering the distance it went into the Edwards the water is not checked up against it.

George E. Smith is starting No. 1 Behring which is 300 feet south of A. W. Wormers' No. 1 Pfullman and 450 feet west of the discovery well producing in the chalk and will carry it to the Edwards lime. Also Sal-Mar Oil Co. which brought in the discovery well is starting No. 1 Hempel about a half mile south of the discovery well and will carry it to the Edwards lime.

Operators are satisfied that the Edwards lime possibilities of this new district have not been tested out yet. Only one test went to the Edwards and it drilled in too deep and there is some doubt whether it will be able to plug back and get the water shut off.

Starr County Activity

Pipe line connection has been made for the Starr County pools. The line was built from the Los Olmos Pool 8 miles to Rio Grande City to loading rack and the Rio Grande City Field of four wells is in the edge of Rio Grande City. With pipe line outlet for the fields considerable additional development is expected in both.

In the Rio Grande City Field three completions last week seem to mark the field as being a narrow one. L. W. Connor's No. 1 Goodrich, three locations southwest of the discovery well, is dry and E. D. Traylor's No. 1 LaBorde, two locations northeast of the discovery well, is dry. Swift's No. 2 Doyno, 300 feet west of his No. 1 Doyno, is dry. No. 1 Doyno is northwest of the discovery well. The four producers of the field lie in a line northwest and southeast. The southeast end is cut off with dry holes but nothing to stop the field from running a long distance to the northwest and nothing to keep it from broadening out at the northwest—that is nothing in the shape of dry holes.

New Area in Webb County

French Oil Corp. has opened a new oil producing area on the east side of gas production in the West Cole Field in Webb County. No. 1 Rosa Benavides, 450 feet from the south and west lines of Survey 659 is on a Sun Oil Co. lease, at 2,331 feet is reported as a 75-bbl. oil well. There is an oil pproducing area about three-quarters of a mile north. Magnolia Petroleum Co. and French Oil Corp. being the only producers in the area, and there is oil production at the south end, 3 miles south and a mile west of the new French well in the original West Cole Field. It is probable the new producer is a south extension of the north pool.

In the Laredo district outside of the Duval County area developments were not numerous though there were 8 new wildcat locations announced and 12 new locations in proven areas.

Norden & Morris, who have been trying to find production in the Leaseholders area in Webb County, have abandoned their second attempt and are starting No. 3 Gates. A little production was developed here some years ago but it was never very satisfactory and the area never developed into a pool though it looked for a time as though it would.

Two miles south of the new Rosenberg Pool in Webb County O. W. Killam has drilled and abandoned two wildcats but has set casing on the third for a test and may either open a new pool or greatly extend the other to the south.

In the extreme southern part of Zapata County where it has been talked several important wildcats would start, F. J. Searight completed his first test on Porcion 18 as a water well at shallow depth and has skidded the rig a few feet and is now ready to drill his deep test for oil.

Wildcat Operations in Southwest Texas

Week Ending August 12

Company, farm and location—	Remarks:
ATASCOSA COUNTY	
American Central Oil Co.'s No. 2 Mary McConnell, 150 ft. W of E line, 300 ft. S of No. 1, Blk. 138, W. C. M.	
Baker Sur., 3 miles W and 6 miles S from Somerset	T.D. 1,660 ft.; standing.
Etheridge et al's No. 1 McCowen-Dickinson, Campbell-Berry Sur.	Location.
Glen Mathis' No. 2 Mrs. C. Martin, 100 ft. SE of No. 1	T.D. 2,980 ft.; abnd.
BANDERA COUNTY	
F. A. Brown's No. 1 R. B. Watson, 600 ft. N of cen. of S line of Sec. 71	T.D. 70 ft.; drlg.
BASTROP COUNTY	
Marts & Beavens' No. 1 A. Neidig, 150 ft. from E line, 525 ft. from N line of tract in J. Burleson Sur.	Location.
Parsons & Mayfields' No. 1 Carroll, N of town of Bastrop	Spudded in.
Properties Trading Co.'s No. 1 Henry Freitag, 400 ft. from SE line, 1,800 ft. from NE line of P. Conley Sur.	T.D. 1,325 ft.; drlg.
BEE COUNTY	
Fitzgerald & Pryer's No. 1 Albert Johnson in M. Alcarte Sur.	Rigged up and S.D.
Howeth & O'Neal's No. 1 King ranch, 660 ft. from N and W lines of Kleberg 140-acre tract in Robert Stevenson Sur.	T.D. 1,520 ft.; drlg.
C. F. Nichols' No. 1 Kimball, 225 ft. N, 40 deg. W of Grayburg Oil Co.'s No. 1 Kimball	T.D. 2,275 ft.; drlg.

(Continued on Page 70)

Unitization Plan Is Submitted for Hobbs District; Tests East of Greasewood Disappointing

By TOLBERT R. INGRAM
Staff Correspondent, Rocky Mountain Area

DENVER, Colo., Aug. 15.—A plan proposed for the unitization of the Hobbs Pool has been submitted to Governor Seligman of New Mexico. The Gypsy Oil Co.'s No. 2 Graham, in the Hobbs Pool, is preparing to drill in. The Tidal Oil Co.'s No. 1 State, a mile north of production in the Eunice area, had a gas blowout at 2,971 feet. Leonard & Levers' No. 7 Levers-State, in the Jackson area, was only a small gas well. A second deep test in Valencia County is to be drilled by Homer C. Mills, Inc., on the Tome grant.

Results of three tests drilling to the east and northeast of the Greasewood Pool in northeastern Colorado are disappointing. Another deep test is to be drilled in Elbert County, 60 miles to the south, by California interests. Two new operations are getting under way in Las Animas County.

In Wyoming, the Osage Field had a 400-bbl. completion in the new west extension. Ohio Oil Co. made a new location for a test to the Sundance in Lance Creek. One new location in Natrona County was reported. Oregon Basin again is running a little oil after being shut in for some time.

The Border Field in Montana reports a completion estimated at 1,500 bbls. initial, the best well so far completed in that pool. The Embar was dry in Ohio Oil Co.'s deep test at Dry Creek in Carbon County.

In Washington, Ohio Oil Co.'s test near Aberdeen, continues to show considerable gas in shale, but has not yet encountered a true sand.

NEW MEXICO

Lea County

A plan for the unitization of the Hobbs Pool, upon which a committee of engineers representing the operators have been at work, has been completed and submitted to Dr. E. H. Wells, state geologist. Doctor Wells, in turn, has presented the report to Governor Seligman, who is studying it. It is understood that most of the operators are in favor of the plan, but state approval is necessary before it can be adopted and put into operation. At present the field is under proration, each well being allowed to produce its prorata share of the total allowable outlet. Under the unit plan it is proposed to take oil from the wells from which it can be produced most advantageously, those having an excessive gas flow or water being closed in. The present proration agreement does not expire until January 10, 1933, but since July 10 any of the parties to the agreement, including the State, may withdraw upon giving 30 days' notice.

Midwest Refining Co.'s No. 29 Turner, C SW NW, Section 34-18-38, an outside well in the southeastern part of the field and a north offset to the same company's No. 8 Turner, was drilled to 4,180 feet. Top of the pay was at 4,083 feet and 3-inch tubing was run to 4,160 feet. It is cleaning out and preparing for official gauging. It looks as if it will make around 5,000 bbls. Same company's No. 11 Terry, C NE SE, Section 9-19-38, is drilling at 3,391 feet in anhydrite. It bottomed the salt at 2,630 feet and topped the brown lime at 2,880 feet. The first gas was encountered at 2,881 feet.

Skelly Oil Co.'s No. 1 Turner, SE NW, Section 34-18-38, one location east of Midwest's No. 29 Turner, is bottomed at 1,640 feet and is redrilling to straighten at 800 feet.

In the northern part of the field, Gypsy Oil Co.'s No. 2 Graham, NE cor., Section 24-18-37, is bottomed at 3,978 feet and is preparing to drill in. The 7-inch was cemented at 3,975 feet. Empire Gas & Fuel Co.'s No. 4 Boon Hardin, NW cor., Section 19-18-38, is drilling at 2,770 feet in anhydrite, and Shell Petroleum Corp.'s No. 1 Lizzie Rice, SE cor., Section 13-18-37, is drilling at 3,228 feet in anhydrite and lime. The last named topped the brown lime at 2,821 feet, had first gas at 2,835-95 feet and an increase at 2,815-25 feet. There was a show of oil at 3,215-23 feet.

In the Eunice area, Tidal Oil Co.'s No. 1 State, C SW NE, Section 8-21-36, is drilling at 3,046 feet in anhydrite and lime. It topped the brown lime at 2,960 feet and had some gas at 2,915 feet and an increase at 2,971 feet. There was a blowout at 2,971 feet. This location is nearly a mile north of Atlantic Oil Producing Co.'s No. 1 Colman, the nearest producer, and is running a little lower on the lime.

Eddy County

W. A. Scott's No. 1 Kaiser, NW SE, Section 7-18-27, southwest of the Artesia Pool and a little southwest of the Compton producers on the Brainard tract, is shut down at 1,058 feet in white lime. It topped the Compton-Brainard sand at 1,038 feet and had a small show of oil. It probably will go to around 1,100 feet.

Flynn, Welch & Yates' No. 63 State, SE cor. NW, Section 10-19-28, Artesia area, a diagonal offset on the northwest to their No. 62 State, recently completed as a producer, is drilling at 230 feet in the red beds. It spudded August 1.

Leonard & Levers' No. 7 State-Levers, C SW SE, Section 20-17-29, Jackson area, was completed at a total depth of 2,266 feet as a gas well. It gauged 175,000 feet in 24 hours and is not as large as the other gassers completed in the immediate vicinity.

R. Spearow and others' No. 1 McClelland, SW NW NE, Section 22-22-23, 25 miles west of Carlsbad, is building standard rig.

Chaves County

R. D. Compton's No. 1 Emerson, SW cor. SE, Section 20-10s-24, near Roswell, had an increase in water at 421 feet and is drilling at 510 feet in gray lime.

Warman Oil Trust's No. 1 Evans, N half, Section 15-14-25, Blackdom district, is bottomed at 1,433 feet with a hole full of water and is pulling pipe to plug. It had a show of oil at 1,150-60 feet, which was shot with 40 quarts, but failed to respond as a producer.

Bernalillo County

Norrins Realty Co.'s No. 1 Pajarito grant, NW cor. NE, Section 22-9n-1e, is drilling at 2,605 feet in river wash.

DeBaca County

Landowners Oil Co.'s No. 1 McAdoo-State, SW cor. NE, Section 16-1s-27, Buffalo Creek, is bottomed at 5,014 feet in gray shale and has landed 6⅝-inch at 5,005 feet and will carry same.

Curry County

Cranfill Brothers' No. 1 Hammond, for which a location was made in Section 15-5n-33, last May, has materials on the ground, but probably will not start drilling before October. It is in the center of a block of 20,000 acres and contract calls for a 4,500-foot hole.

Valencia County

Homer C. Mills, Inc.'s No. 1 Tome grant, C NW SW, Section 29-6n-3e, is building rig for a 5,000-foot rotary test. E. B. Guess Drilling Co. has the contract.

Western Natural Resources Corp.'s No. 1 De Chaves, C NW NE, Section 8-6n-1e, 12 miles southwest of Los Lunas, is drilling below 700 feet.

McKinley County

H. L. Williams and others' No. 4 Hospah, CSL NW, Section 21-18-8w, is reported resuming at 1,800 feet.

COLORADO

Weld-Morgan Counties

The three test wells drilling in Weld and Morgan Counties east and northeast of the Greasewood producers are not showing as favorably as hoped and a distinct note of pessimism prevailed among the oil men interested in that area. Manning & Terry's No. 1 Henry Niles, C SE NE, Section 13-6n-61, half a mile east of Continental Oil Co.'s No. 1 Briggs, best of the Greasewood producers, is shut down at a total depth of 6,721 feet waiting for orders. The 7-inch was cemented at 6,589 feet and plug was drilled out the past week. Salt water rose 4,400 feet in the hole. This water is believed to be coming from the Dakota which was topped at 6,709 feet. From 6,611 to 6,650 feet the hole went through a sandy shale formation with a few feet of saturated sand in it. This horizon is believed to be what is left of the Muddy formation, the producing horizon in the wells to the west. Whether further efforts will be made to shut off the Dakota water or the hole drilled deeper has not yet been announced. The prevailing opinion is that this well is in a fault.

Half a mile to the northeast, Ohio Oil Co.'s No. 1 Butters, C SW SW, Section 7-6n-60, cemented 7-inch at 6,683 feet, on top of the Muddy, which was cored for about a foot and showed some oil and gas saturation. The plug was then drilled out and the hole was cored to 6,715 feet. The cores showed only about 7 feet of sand with some gas and a little oil. The hole then was bailed down to around 1,000 feet and nothing of importance broke through. The bailer was lost and at last reports fishing was in progress. It is believed the well will make some oil, but no estimate is made as to how much.

Farther northeast, in the New Raymer district, Tulsa-Fort Morgan Petroleum Corp.'s No. 1 Anthes has reached 3,025 feet and is still in the Hygiene. It has not yet picked up the big sand at the base of the Hygiene. These beds apparently are much thicker than expected and the well is not running as high as first evidences indicated.

Most of the tests drilled in northeastern Colorado this year and last year have been along the line of folding mapped by the U. S. Geological Survey in 1923. The discouraging results so far have caused many to wonder if the whole wildcatting campaign in that area did not get off to a wrong start and if the most promising territory does not yet remain to be prospected.

Elbert County

The next important wildcat to be drilled in northeastern Colorado will be located in Elbert County, about 60 miles south of the operations to the north. It will be drilled by J. M. Botts and others in their No. 1 Union Pacific-Richardson, C NW SE, Section 7-8s-58, on what is known as the Buick structure. Los Angeles and San Francisco men are associated with Botts in this test for which a California rotary outfit with a 122-foot steel derrick is being moved in. H. I. Hall Drilling Co., which has had experience in deep well drilling in California, has the contract. It calls for a 6,000-foot hole or to production. This operation, which the contractors expect to complete in 90 days, will attract considerable attention. It is about 1½ miles southeast of No. 1 Buick, SE cor., Section 1-8s-59, which Botts and associates started in 1928. It was drilled to 3,500 feet, but had a lot of pipe and other iron in the hole. At around 3,000 feet it had a good show of gas. After numerous efforts to overcome these troubles, the pipe was pulled back to 2,000 feet and through this junk in the open hole and cavings it continues to make enough gas to fire a boiler. These interests have something like 60,000 acres blocked. This summer John H. Wilson, consulting geologist of Golden, did extensive geological work in the district, followed by core drilling with an outfit and crew loaned by Midwest Refining Co. The test, which Wilson spotted, starts about 100 feet above the base of the Laramie. A 6,000-foot hole at this location will give a good section of the formations in that part of the State. The sand in which gas was found in No. 1 Buick is described by Wilson as having a good sand body about 80 feet thick. It has been named the Botts sand. The prospects for gas in this horizon, which is expected at around 3,100 feet, are considered favorable, although the Dakota is the objective. Much of the acreage blocked up is Union Pacific Railroad land.

Las Animas County

P. W. Harr and others have gone back to their original location on the Cordova tract in the SE cor. NE, Section 15-33-63, for their Gray Creek test, due to a better agreement for a water supply, and materials for a standard rig are on the ground. For the same reason, the location for their No. 1 Barela has been shifted a little to the east to the CNL NW NE, Section 33-33s-62. Standard rig is up.

Montezuma County

Carl H. Smith and others' No. 1 West, NE NW NE, Section 31-36-17w, McElmo structure, is shut down at 400 feet.

Routt County

The Texas Company's No. 4 Carstarphen-Irwin, NE NW NW, Section 5-6n-86, Tow Creek, is drilling and swabbing at 3,785 feet.

Moffat County

William A. Myers and others' No. 1 State, NW SW SW, Section 16-4n-101, Skull Creek, is bottomed at 2,950 feet. After standing during the winter, the hole has been cleaned to the top of the tools and fishing is in progress. This is a test of the Pennsylvanian formations.

Rio Blanco County

The California Co.'s No. 1 California-Raven, NW SE, Section 30-2n-102, a Pennsylvanian test on the Rangely Dome, is cleaning up at a total depth of 5,664 feet after a fishing job for drill stem and is preparing to resume. It is believed

to be less than 300 feet off the top of the Pennsylvanian. In this formation it expects to test the Weber sandstone.

Magnolia Petroleum Co.'s No. 1 Titley, NW cor. SW, Section 15-2s-96, Piceance Creek, is drilling at 1,025 feet in brown lime.

WYOMING

Weston County

A good completion in the new west extension of the Osage Pool was reported in Federal Oil Co.'s No. 3, SE NE SE, Section 15-46-64, which found the pay at 2,088½-2,103 feet. After being shot with 15 quarts, it flowed 400 bbls. the first 24 hours.

Central West Oil Co.'s No. 1, NE cor. SW, Section 15-46-64, is still fishing for tools, and Riggs Oil Co.'s No. 2, CEL SE NE, Section 16-46-64, is drilling below 2,400 feet. West Osage Oil Co.'s No. 4, CEL W half, Section 13-46-64, is drilling at 500 feet, and Yellowstone Oil Co.'s No. 3, SE NE NW, Section 23-46-64, is drilling at 1,200 feet. Paymac Oil Corp.'s No. 1 Toyne, SE NW NE, Section 3-46-64, is shut down at 515 feet repairing machinery, and Homestake-Osage Oil Co.'s No. 3, SE NE, Section 15-46-64, is drilling at 800 feet. General Oil Co.'s No. 1, SE SW NW, Section 15-46-64, is drilling at 2,100 feet, and Wyoming-Dakota Oil Co.'s No. 1, SE SW NE, Section 15-46-64, cemented the 8¼-inch and shut down. Tug Oil Co.'s No. 2, NE NW SW, Section 15-46-64, is rigging up.

Four miles southwest of the Osage development and in the direction of the present trend, Julius Peters and others are drilling an important wildcat in their No. 1 Witzell, SE cor. SW, Section 30-46-64, on what is known as the Fiddler Creek Dome. At last reports it was drilling at 4,450 feet in the Muddy, which was topped at 4,436 feet, and was showing some oil. It is troubled considerably with caving formations, especially bentonite. Guy Fowler, who drilled the Peters deep test on Badger Basin, the record well for the Rocky Mountain area as to depth, is in charge. Osage produces from a terrace, while Fiddler Creek is mapped as a true structure.

Niobrara County

Ohio Oil Co. has made a location for its No. 2 Richards & Comstock, C NE SW, Section 32-36-65, Lance Creek, for a well to the Sundance, expected at around 3,700 feet. It is about half a mile to the northwest of the Sundance discovery well which was drilled two years ago by the Ohio company and came in for 600 bbls. per day. The new well is being drilled to validate the lease and does not indicate the beginning of a campaign. Only one well has been put down to the deeper pay in the proven part of the field.

Converse County

Continental Oil Co.'s No. 30 Converse Sheep, SW SE SE, Section 4-33-76, Big Muddy, which was shot at 4,312-21 feet in the Lakota and looked as if it would make a small well, is going deeper to see if there is more of the Lakota sand. It is drilling at 4,359 feet. Ohio Oil Co.'s No. 25 Kinney, SE SW SE, Section 4-33-76, is redrilling at 3,725 feet.

Natrona County

Mutual Oil Syndicate's No. 2, C SW SE, Section 14-35-79, Midway Dome, is drilling on iron, a part of the bit, at 5,800 feet and still has 200 feet to go to reach the Muddy.

Lakota Oil & Gas Co.'s No. 7, SW NW SE, Section 1-36-36, on the Minal E. Young permit, North Casper Creek, has rig completed. It will spud at once.

Park County

The Oregon Basin Field, which has been shut in for several months, is running a little oil at the present time, around 100 bbls. per day. The White Eagle Oil & Refining Co. recently purchased some Oregon Basin crude from the Ohio Oil Co. for its Casper refinery and most of this is being moved out of storage. White Eagle is finding a market for considerable road oil.

Henderson Producing Co.'s No. 10, SW NE NE, Section 31-58-99, South Elk Basin, has resumed after cementing at 205 feet to straighten a crooked hole.

Big Horn County

Torchlight Oil Corp.'s No. 1, Lot 8, Section 30-51-92, a test to the Madison in the Torchlight Field, is drilling at 3,600 feet and underreaming and carrying the 6½-inch.

Lovell Dome Association's No. 1 Sheets, Lot 2, Section 9-55-96, Byron district, is shut down after cementing the 15½-inch at 607 feet. Allen Oil Co.'s No. 1 Montana-Wyoming, Lot 52, Section 33-56-97, has rig completed and is moving in material for its well to the Madison lime.

Fremont County

The Texas Company's No. 2 State-Ridgway, SE SW SW, Section 36-34-95, Alkali Butte, is bottomed at 2,400 feet and reaming to straighten.

Sweetwater County

Wyoming-California Petroleum Corp.'s No. 1, SE SE, Section 23-17-104, Baxter Basin, is drilling at 3,780 feet in the Morrison and reported showing a little gas.

Sublet County

California Petroleum Corp.'s No. 7-H-2, Lot 10, Section 3-26-113, LaBarge, is bottomed at 930 feet with the 6⅝-inch cemented at 927 feet.

MONTANA

Toole County

The Border Field in Toole County, which bisects the Montana-Canadian boundary, was reported this week to have a large well in Askalta Oil Co.'s No. 6 Farbo, NE SW NE, Section 2-37n-4w. Reports vary as to what the well did and confirmation has not yet been obtained. One report said it flowed 60 bbls. per hour through a 2-inch flow line with the tools in the hole and was estimated at better than 1,500 bbls. Another said the estimate ran from 1,400 to 2,600 bbls. In any event, it appears to be about the best well completed in the field and apparently the flow comes from a crevice as the location is in the proven area where much smaller wells have been the rule. The production comes from the Vanalta sand in the Ellis formation. It topped this sand at 2,475 feet. The casing was set at 2,473 feet. The Border Field came in three years ago when the discovery well was drilled on the Alberta side a few hundred feet north of the line. In 1930 there were 34 wells drilled of which 18 are producing oil, 1 is a gas well and 15 were abandoned. The field produced 229,418 bbls. in 1931. Structurally it is about 800 feet lower than the Kevin-Sunburst Field. No. 6 Farbo was the only well drilling at the time of completion.

In the Kevin-Sunburst Pool, Bistate Oil Co.'s No. 5 Peterson, NE NW NW, Section 11-34-1w, topped the sand at 1,365 feet and after a shot is cleaning out. It will be an average well. Dakota-Montana Oil Co.'s No. 1 McNett, Section 19-32-1w, is drilling at 1,385 feet, and Myers & Johnson's No. 1, Section 19-34-1w, is drilling at 500 feet.

Carbon County

Ohio Oil Co.'s No. 8 Caldwell, SE SW NE, Section 12-7s-21, in the eastern part of the Dry Creek Field, which found water in the Dakota and Lakota and which is being drilled down to test the lower formations, is drilling at 6,847 feet in the Embar. The sand was dry. Results in the upper sands appear to have been affected either by a faulted condition or indicate the eastern limits of the pool. The same company's No. 7 William Robinson, C SE SE, Section 3-7s-21, is coring in the Lakota at 5,729 feet and is showing considerable oil and gas saturation. The top was encountered at 5,710 feet. The Dakota, topped at 5,536 feet, had a small show of gas. This well is a west offset to No. 1 Chapman, which made 886 bbls. initial from sand at 5,601-35 feet. The Ohio company's No. 11 Bowman, C SE NE, Section 4-7s-21, is standing with the 8⅝-inch cemented on top of the second Frontier at 4,522 feet. Its No. 9 Souders, C NE SW, Section 2-7s-21, has rig completed and is ready to spud.

Jack Creek Oil Co.'s No. 1-A, SW NE SE, Section 15-7s-23, Jack Creek district, is drilling at 615 feet.

Glacier County

Milk River Petroleum Co.'s No. 1 Blackfeet, SW NE NE, Section 28-36-12w, Milk River district, is drilling at 3,460 feet in the Kootenai formation. The Texas Company's No. 1 Peterson, SW NE SE, Section 22-36-5w, Cut Bank district, is drilling at 2,385 feet.

Liberty County

Peoples Oil & Gas Co.'s No. 1 First National Bank, C SE NW, Section 17-36-6e, Bear's Den, has cleaned up its fishing job and landed the 8¼-inch at 2,020 feet. It is repairing boiler and preparing to resume. The Dakota is expected within the next 200 feet.

Teton County

The California Co.'s No. 1 Sullivan, NW NE NW, Section 34-27-7w, Bynum district, is bottomed at 3,654 feet and running the 6¼-inch.

UTAH

Utah Southern Oil Co.'s No. 1 Balsey, C NE NE, Section 31-23-21, Grand County, is bottomed at 5,890 feet and cemented back to 5,830 feet to stop shale and salt from caving. Brendell Oil & Gas Co.'s No. 1, SE SW SE, Section 4-22-19, cemented a cave at 3,400 feet caused by gas flow.

WASHINGTON

Ohio Oil Co.'s No. 1-A Robinson, Section 5-17n-9w, Gray's Harbor County, is drilling and coring in shale at 2,594 feet. Considerable gas continues to show in the shale, but no true sand has as yet been encountered.

Important New Test on Blood Reserve Structure Planned Near Lethbridge, Southern Alberta

By VICTOR LAURISTON
Staff Correspondent, Canadian Fields

CHATHAM, Ontario, Aug. 13.—An important new test will probably be started this summer on the Blood Reserve structure, near Lethbridge, in southern Alberta. Chris Bennetson has consolidated holdings of some 24,000 acres on the structure and tentative location has already been made and a rig has been secured. The acreage includes holdings of Associated Securities, Ltd., of Moose Jaw, Saskatchewan, and of Commonwealth Petroleums, Ltd., of Calgary, as well as individual holdings of E. Minchener, head of Commonwealth Petroleums, Ltd. The Bennetson interests are planning particularly to test the Madison contact, in which the Keho Lake, Texas-Imperial and Twin River tests all encountered oil showings.

The Blood Reserve area is fairly close to these tests. It has been reported on by the Geological Suorvey of Canada, and by a number of independent geologists, including Dr. Eugene Coste. Some years ago Commonwealth Petroleums, Ltd., and allied interests blanketed a large part of the structure. Since then the Commonwealth company had carried on extensive structure tests, a dozen tests, none exceeding 1,000 feet, having been drilled up to the end of 1930, in Townships 7, 8 and 9, Ranges 22 and 23w4. The Bennetson well will be the first actual commercial test undertaken in this area.

The area is defined in reports of the geological survey as occupying about 260 square miles, being that portion of the Blood Indian Reserve in Townships 5 to 9, Ranges 21 to 23w4. It is bounded on the west by the west side of range 23, on the north by the Belly River, and on the east by Old Man and St. Mary's Rivers, the latter stream closing the area on the south. In addition, a narrow strip bordering the reserve on the east and south is included, as well as a considerable area along the Old Man River north of the Belly River.

South of the Blood Reserve are the Twin River and Spring Coulee wells, and east the Texas-Imperial well. No. 1 Keho is in a rather northerly direction. All these tests got shows of high grade crude in the top of the Madison which was encountered somewhat higher than in the Turner Valley and it is thought that with the more favorable structural conditions a test on the Blood Reserve is likely to show commercial production in this horizon. There is also a possibility of shallower production in the Benton shale, a stray sand in the Benton having shown what was practically commercial production in the Keho Lake well. Bennetson's No. 1 is planned for a thorough deep test of the structure.

On the Montana end of the international Red Coulee Field, Askalta Oils' No. 6 Farbo, NE SW NE, Section 2-37-4w, came in a sensational flowing well when the Vanalta sand was tapped at 2,481 feet. The first two-hour test indicated a potential of at least 3,600 bbls. a day, making it by far the largest well yet drilled in the Red Coulee Field. On a 24-hour test with the valve less than one-fourth open it made actual production of 987 bbls., and a settled production of about 500 bbls. a day is looked for. The oil is reported free from water and can be run direct to pipe line.

Askalta Oils, Ltd., which has latterly been the only company actively drilling in the Red Coulee Field, was financed largely by Calgary capital and has its office in that city. Officers are: President, W. R. McArthur; managing director, W. F. M. Plotke; secretary, W. C. Fisher. Askalta's No. 6 started drilling on June 25 and took 38 days' actual drilling to reach production. Production commanding the Montana price of $1.05 a barrel in United States funds will be piped to Coutts, Alberta, where production of the earlier Askalta wells is marketed. These wells delivered 9,445 bbls. in July. In addition to its big oil production, Askalta's No. 6 got a heavy gas flow in the Sunburst sand around 2,380 feet, estimated 3,500,000 feet a day or better. It is higher on the structure than the earlier wells. Askalta's Nos. 7 and 8 will be drilled as soon as possible.

South Turner Valley

In the far south of the South Turner Valley area, Mar-Jon-Freehold's No. 1,

LSD 9, Section 28-18-2w5, is drilling below 4,700 feet and near the base of the Dalhousie sand. The test logs closely with Merland's No. 1 producer, in Section 27. Farther north, Canadian Royalties' No. 1, LSD 9, Section 5-19-2w5, is drilling below 2,700 feet after installing a new line.

Central Turner Valley

In Central Turner Valley, McLeod Oil Co.'s No. 4, LSD 16, Section 1-20-3w5, has resumed drilling at 6,920 feet after installing a new cable. At this depth it is 320 feet below British Dominion's No. 1, which at 6,600 feet held the former deep drilling record for Canada, and is still drilling 8-inch hole. The drill is thought to be in or close to the Devonian limestone, and the hole is apparently in good shape to make a thorough test of that potential oil horizon, which has never previously been benetrated in the Turner Valley.

New McDougall-Segur Oil Co.'s No. 5, LSD 14, Section 12-20-3w5, is reported drilling close to the upper pay in the Blairmore at 1,900 feet.

North Turner Valley

In the North Turner Valley area, Model Oils' No. 2, LSD 16, Section 22-20-3w5, is drilling in the red beds below the McDougall-Segur sands at 3,953 feet, and is logging about 300 feet higher than Model's No. 1 producer, a half mile further south.

Shareholders of Commonwealth Petroleum, Ltd., held their annual meeting last week at Calgary, when the following officers were re-elected: President, E. Michener; vice president, R. J. Hutchings; secretary-treasurer, S. A. Annand; directors, D. J. Young, Calgary; W. H. Sharpe, Winnipeg, Manitoba; and James Robinson, Millerton, New Brunswick.

Test Near Steveville

In the Red Deer Valley, southeast of Calgary, Steveville Oil Co.'s No. 1, LSD 8, Section 4-22-12w4, is preparing to resume at 60 feet after a shutdown for casing and coal.

Tests in the Foothills

On the Moose Mountain structure, north of Turner Valley, Elbow Oils' No. 1, LSD 11, Section 35-22-5w5, is reported making new hole below 3,372 feet, with geological indications very encouraging.

In the old Oil City Field near Waterton Lake, Patrick-Pence Syndicate's No. 1, Section 30-1-30w4, has finished derrick and is hauling drilling equipment to location.

Keho Lake Well

In the Keho Lake district, northwest of Lethbridge, Hudson's Bay Oil & Gas Co.'s No. 1 Keho, LSD 2, Section 17-11-22w4, is sidetracking and milling old iron around 4,840 feet, about 70 feet off the old bottom. A. M. Polen of the Continental Oil Co. is supervising completion of the well, and three tours are working.

Montana Tests

Reports of recent completions in the Whitlash Field of Montana, adjoining the international boundary, are not very encouraging for a potential field on the Alberta end of the structure, a number of tests having finished dry and been abandoned.

On the Milk River structure in Glacier County, Blackfeet Petroleum Corp.'s No. 1, NE, Section 29-36-12w, which is being completed by the Sheldon-Burden Rotary Drilling Co. for the Frye interests of Seattle, is reported held up by a fishing job just below 3,200 feet.

Athadome Test

In the Athabaska district, northern Alberta, Athadome Oils' No. 1, N half, Section 20-72-24w4, is reported to have resumed at 1,722 feet after running 6⅝-inch casing. A decision was reached recently to carry the test to the Athabaska or McMurray sand around 1,900 feet. This horizon is the basal cretaceous sand of the Athabaska area which at its outcrop, some 200 miles further north, carries large quantities of asphaltic residue. Athadome's No. 1 reported an oil showing in one of the upper sands, but it appears to have been more in the nature of residual asphalt than free oil. If the lower formation fails to yield commercial production, the outfit will be moved to another location for No. 2 test, which is to be completed this season.

Kinsella Operations

Following the completion recently of Northwestern Utilities' No. 1 Harvey, LSD 1, Section 17-47-11w4, the outfit has been moved to a new location for No. 2 Harvey. No. 1 Harvey, which got a production of 7,600,000 feet a day at 2,177 feet is between 10 and 15 miles south and west of Messaba Oil & Gas Co.'s No. 1 discovery well in LSD 3, Section 29-48-10w4, which has a shutin potential of 20,000,000 feet a day. No. 2 Harvey will be drilled about midway between the two previous wells, and location was made following surface and geophysical surveys and core drilling. The Viking gas field, from which Northwestern Utilities, Ltd., previously drew its entire gas supply for Edmonton, is west and north of the Kinsella wells, forming a sort of northwest apex to a triangle the base of which is a line slanting southwest from the Messaba's No. 1 to No. 1 Harvey. According to available information, conditions encountered in No. 1 Harvey more nearly resembled those of the Viking wells than Messaba Oil & Gas Co.'s No. 1 in the Kinsella Field; and No. 2 Harvey will probably furnish interesting information in regard to the possible connection between the two producing areas.

Ribstone Production Fails

A feature of recent Alberta developments has been the failure of the Ribstone Field in East Central Alberta to hold up under steady production. The Ribstone structure was first mapped by Dr. G. S. Hume a number of years ago. It lies east of the Wainwright Field, and extends across the Saskatchewan boundary. Imperial Oil's No. 1 Ribstone, drilled in 1927 in LSD 5, Section 5-45-1w4, was abandoned at 3,489 feet after getting small shows of oil and gas. Commercial production was secured in 1929 in Meridan Oils' No. 1, LSD 3, Section 16-45-1w4, the oil sand being at 1,827 feet. In 1930 production was encountered in Meridian's Nos. 2 and 3 and Imperial Oil's No. 2 Ribstone, the four producers forming a closely placed group in Sections 9 and 16, Township 45-1w4. Five wells outside this area got oil shows but failed to develop commercial production.

The oil was a heavy crude, not readily marketable to the refineries; but Ribstone Oils, Ltd., which held extensive acreage in the field arranged to handle production which was taken by the railroads for fuel oil purposes, the crude being trucked to the nearest rail point. Deliveries were maintained for the greater part of 1931, running 30 bbls. a day or better from the four wells; but toward the end of the year the wells went to water almost entirely, and later were abandoned. No deliveries have been reported since December, 1931, and indications are that the Ribstone development represented a small pool rather than a real field.

In the Wainwright Field farther east, water troubles have developed in individual wells; but though the field is an older one, and productive of a similar quality of heavy crude from the same horizon, some production is still maintained. The Ribstone wells appeared to be much better initial producers than those in the Wainwright Field, but there was much less gas with the oil.

Montana Test

Myers and Johnson of Calgary, Alberta, have spudded in their No. 1 test in Section 19-34-1, in the Kevin-Sunburst Field. Location is stated to be on the highest structural point in the field, and is west of the Bethel-Adams gasser, which got a large gas production from the limestone.

Manitoba Oil Shows

Some small oil shows have been encountered in Commonwealth Petroleums' No. 2, LSD 2, Section 26-2-9-wPM, now drilling below 2,050 feet in the Manitou district, southwestern Manitoba. Analysis of samples shows that the drill is in the Ordovician which is productive in Kansas and Oklahoma. Production is looked for in the Winnipeg sand around 2,250 feet, with possibilities of both oil and gas.

British Columbia Test

In southeastern British Columbia, Crow's Nest-Glacier Oil Co.'s No. 1 in the Sage Creek Field, is making hole below 3,224 feet in a soft gray limestone, after drilling through the black limestone shattered by the old shot of a couple of years ago. Small shows of light crude and some increase in gas flow were reported in the black lime but there has been no change in production since the drill left that formation.

Drilling in Ontario

In the Dawn Field, Lambton County, Union Gas Co.'s No. 62 in the west end of the field has finished a dry hole at the bottom of the Clinton at 2,115 feet, and is being pulled and plugged. Union's No. 63 in the same field is drilling below 1,060 feet.

In Sombra Township, Lambton County, Black Bear Syndicate's No. 1, N half, Lot 15, Concession 13, was last reported drilling in brown shales around 360 feet. Farther east, Michingan-Pacific Oil & Gas Co.'s No. 2 has been located in Lot 20, Concession 10, Euphemia Township. Location is 500 feet west of the east line and 100 feet south of the north line of the lot. Michigan Pacific's No. 1 in Lot 10, Concession 12, Brooke Township, finished some months ago at 2,637 feet. No. 2 is closer to proven territory.

In Kent County, Union Gas Co.'s No. 21, Lot 22, Concession 10, Raleigh Township, in the north end of the D'Clute Field, has been pulled and plugged, after finishing at 1,833 feet as a small gasser, later developing water. No new work is being started, though it is reported F. H. Stover & Son may drill a test in Raleigh Township in conjunction with the Olga Oil & Gas Co.

In the old Tilbury Field, Southern Ontario Gas Co. is cleaning out and reconditioning some of its old producing gas wells.

In the Tillsonburg Field, Norfolk County, Acme Gas & Oil Co.'s No. 10 has been tentatively located naer Mabee's Corners and is waiting for equipment.

New Conservation Measure

Announcement has been made of a new conservation regulation for the province of Alberta under the Oil and Gas Wells Act. Under this new regulation the gas production of every well from which oil and gas are produced simultaneously through the same string of casing is to be produced if the well were operated at a pressure equal to 80 per cent of the closed-in pressure of the well.

This restriction is subject to the proviso that if the minister of lands and mines is satisfied that production cannot be safely restricted to the percentage prescribed, he may fix the amount of gas production at the lowest percentage at which the well can be safely operated. The restriction is made with a view to preventing premature depletion of the gas reservoirs.

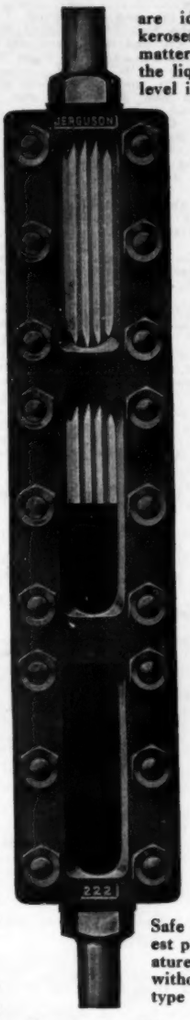
Hylo Well Breaks Loose

In the South Turner Valley Field, Hylo Oils' No. 1, LSD 12, Section 4-19-2w5, ran wild when the valves were opened for testing, on instructions of the Turner Valley Gas Conservation Board. Pressure on the well had been held down to 1,000 pounds, and when freed the gas broke loose with terrific force and burst into flames, destroying the derrick. Damage to the control valves prevented the immediate shutting in of the flow. Damage was estimated between $10,000 and $15,000.

Pan Canadian Petroleums, Ltd., of Vancouver, British Columbia, has been registered in Alberta with offices at Lethbridge, and Edward J. Rossiter as attorney. The company holds a number of oil lease in various parts of Alberta.

JERGUSON

REFLEX GAGES



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Gulf Coast Fields and Wildcats

(Continued from Page 50)

Gulf Prod. Co. and Humble Oil & Ref. Co.'s No. 3-A T. I. Booth, Samuel Kennedy Sur., 300 ft. due S
The Texas Company's No. 1 Wolters ..... Rig.
Gulf Prod. Co. and Humble Oil & Ref. Co.'s No. 2 T. B. Booth, Samuel Kennedy Sur., 2,991 ft. from W line and 467 ft. from E line of E half of tract (452 ac.)... Derrick.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 3 Davis, Robt. Peebles Sur., 500 ft. E of No. 1 and 150 ft. S of N line of tract ..... Rig.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 5 George, John Rabb Sur., 1,000 ft. E of No. 4 ..... Location.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 1-B George, John Rabb Sur., 1,000 ft. from W line and 330 ft. from N line of "B" lease ..... Drlg. gumbo 1,075 ft.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 4 Lockwood-Second hole, John Rabb Sur., 250 ft. E of No. 4 Lockwood-First hole ..... Rig.
Humble Oil & Ref. Co. and Gulf Prod. Co.'s No. 5 Lockwood, John Rabb Sur., 300 ft. from N line and 1,000 ft. from W line of 350-ac. tract ..... Derrick.
Humble O. & R. and Gulf Prod. Co.'s No. 7-A Lockwood & Sharp, John Rabb Sur., 1,500 ft. E of No. 3-A ..... Shale 5,204 ft.
Humble O. & R. Co. and Gulf Prod. Co.'s No. 8-A Lockwood & Sharp, J. Rabb Sur., 1,000 ft. W, 300 ft. S NE cor. of 369.3-ac. tract ..... Sand 285 ft.; cmtd. 15½-in. surface pipe.

Humble O. & R. Co. and Gulf Prod. Co.'s No. 3-B Lockwood & Sharp, J. Rabb Sur., 1,000 ft. from E line and 300 ft. from N line of Tr. 1 (938.75 ac.).. Sand 5,311 ft.; cmtd. 7-in. (O.D.) csg. 5,286 ft.

The Texas Company's No. 2 Wolters, Samuel Kennedy Sur., 150 ft. out of SE cor. of 100-acre lease ..... Rig.

SOUR LAKE—HARDIN COUNTY

Prudential Oil Co.'s No. 1 Maco Stewart, Stephen Jackson Sur., 1,050 ft. from S line and 150 ft. from W line of 50-acre tract ..... Drlg. shale and lime 3,506 ft.

HIGH ISLAND—GALVESTON COUNTY

Yount Lee Oil Co.'s No. 30 Cade, N. Fitzsimmons Sur., 300 ft. NE of No. 23 in line parallel with NW line Blk. 15 ..... Drlg. hard sand 3,005 ft.
Yount Lee Oil Co.'s No. 31 Cade, N. Fitzsimmons Sur., midway between and in line with Nos. 21 and 29 Cade ..... Drlg. shale and lime 2,325 ft.
Yount Lee Oil Co.'s No. 2 Broussard & Orme, Martin Duman Sur., 300 ft. SE of No. 1 ..... T.D. 5,193 ft.; sand 5,103-61 ft.; cmtd. 7-in. (O.D.) csg. 5,092 ft.
Yount Lee Oil Co.'s No. 12 Smith, Martin Dunman Sur., 330 ft. W of No. 11 and 100 ft. N of No. 2 ..... Drlg. sand and lime 2,936 ft.
Yount Lee Oil Co.'s No. 2 M. M. Spencer, Martin Dunman Sur., center of tract in line with No. 11 Smith and No. 2 Nellie League ..... Drlg. sand and lime 4,193 ft.

SARATOGA—HARDIN COUNTY

Rio Bravo Oil Co.'s No. 36 "J" lease ..... Set 1 jt. 6⅝-in. screen; comp. flowing 15 bbls. net oil.
Rio Bravo Oil Co.'s No. 36-A "J" lease ..... Drlg. shale 156 ft.

HUMBLE—HARRIS COUNTY

Burt & Deerings No. 2 C.O.&G.-Texas Co. fee, J. B. Stephenson Sur., 50 ft. E and 50 ft. S of SE cor. of Wheeler & Pickens Blk. 24 in 25-acre tract ..... Drlg. sandy shale 1,855 ft.
J. D. Clay's No. 3 Bender, R. Dunman Sur., 150 ft. from S line and 50 ft. from E line of 100-acre tract ..... Drlg. 500 ft.
Rio Bravo Oil Co.'s No. 1 Westheimer, 965 ft. W and 300 ft. N of SE cor. of Westheimer Subd., John Jones Sur. ..... Drlg. shale 2,406 ft.
Sun Oil Co.'s No. 58 River, 75 ft. N and 75 ft. W of SW cor. of E. M. Wilson Blk. 21, R. Dumman Sur. ..... Sand showing oil 1,354 ft.; cmtd. 7-in. csg. 1,310 ft.

Sun Oil Co.'s No. 59 River, R. Dunman Sur., 74 ft. from E line and 1,441 ft. from S line of block ..... Rig.
The Texas Co.'s No. 36 House, Mary Owens Sur., 100 ft. W of No. 20 ..... Set 220 ft. 4¾-in. screen with full string of 4¾-in. pipe to top; flowed 50 bbls. P.L. oil in half hour but went to water and died; pulled tubing.

E. M. Wilson's No. 1 Wheeler & Pickens, Blk. 21, J. B. Stevenson Sur. ..... Set 23 ft. 4½-in. screen 1,421 ft.; comp. flowing 15 bbls. daily.

MYKAWA—HARRIS COUNTY

Crown-Framer Oil Co.'s No. 1 Sladous (W.O.), Wm. Lovett Sur., 150 ft. from S line, 350 ft. from E line of tract ..... T.D. 5,900 ft.; trying to sidetrack.
Crown-Framer Oil Co.'s No. 1-A Sladous, Wm. Lovett Sur., 75 ft. due W of No. 1 ..... Drlg. gumbo 1,205 ft.
Crown-Framer Oil Co.'s No. 3 Minneter, 100 ft. from N line and 100 ft. from E line of W half of Block 251, Wm. Lovett Sur. ..... Derrick.
Hamill & Smith's No. 1 Ward, 50 ft. out of SE cor. of Ward 10-ac. tract, Blk. 136, Wm. Lovett Sur. ..... Rig.

PIERCE JUNCTION—HARRIS COUNTY

Gulf Production Co.'s No. 35 Taylor, Hamilton Sur. No. 52, 50 ft. S of No. 1 ..... Heaving shale 4,244 ft.
Moody Corp. and Pure Oil Co.'s No. 1 Herman (W.O.), J. Kopman Sur., 300 ft. due W of C of E line of 25-acre tract ..... Sand showing oil 4,831-51 ft.; running screen.

Rio Bravo Oil Co.'s No. 21-A Settegast (D.D.), J. Kopman Sur., 400 ft. S and 200 ft. E of NE cor. "A" lease ..... Set 80 ft. 10 in. of 4¾-in. screen 4,315 ft.; swabbed salt water; cmtg. bottom of hole.

S. B. Ward's No. 1 Mowery, J. Hamilton Sur. No. 52, 300 ft. from W line, 60 ft. from N line of 24-ac. tr... Shut down 1,704 ft.

ESPERSON—LIBERTY COUNTY

Cranfill-Reynolds Co.'s No. 1 Moore's Bluff (D.D.), 50 ft. out of NE cor. of M. Duncan ..... No report.
Cranfill-Reynolds Co.'s No. 5 Davis (D.D.), Kokernut Sur., 150 ft. from S line, 1,197 ft. from E line of tract ..... No report.
Cranfill & Reynolds' No. 5 Esperson (W.O.), M. Duncan Sur., 100 ft. N line and 300 ft. E line ..... T.D. 6,711 ft.; cmtd. to 5,250 ft.
Cranfill-Reynolds Co.'s No. 9 Moore's Bluff, M. Duncan Sur., 500 ft. S of N line of Moore's Bluff tract in line with No. 6 Davis and No. 6 Moore's Bluff ..... Location.
Cranfill-Reynolds Co.'s No. 10 Moore's Bluff, M. Duncan Sur., 1,500 ft. from E line and 2,100 ft. from N line of 632-ac. tract ..... Spudded.

HULL—LIBERTY COUNTY

Aberell Co., Inc.'s No. 1 fee, Jesse DeVore Sur., 700 ft. from E line and 64 ft. from N line ..... Derrick.
Eclipse Oil Co., No. 2 Barrow, Jesse Devore Sur., 55 ft. W, 35 ft. S of most easterly NE cor. 2.7-ac. tract.... Coring sandy shale 5,230 ft.
Eclipse Oil Co.'s No. 1 Knox-Nelson-Layton, Jesse DeVore Sur., 30 ft. from N line and midway E and W of ½-acre tract ..... Derrick.
Hannah Oil Co.'s No. 1 Hannah, Jesse DeVore Sur., 100 ft. W of The Texas Co.'s No. 1 Hannah ..... Cmtd. 13-in. csg. 534 ft.; standing.
D. & L. Prod. Co.'s No. 3 Mecom & Layton, Jesse DeVore Sur., 50 ft. from S line, 40 ft. from W line of 2-ac. tr. ..... Drlg. 2,495 ft.
Gulf Coast Development Co.'s (Healey & Southerland) No. 1 Findley, Jesse DeVore Sur., 50 ft. from E line and 100 ft. from N line of 4-ac. tr. ..... Sand 1,905-45 ft.; set 32 ft. 4½-in. screen; rigging up to pump.

Houston Prod. Co.'s No. 1 Baldwin, Jesse DeVore Sur., 322 ft. from S line and 50 ft. from E line of 5-acre tract ..... Sand showing oil 4,618 ft.
Republic Prod. Co.'s No. 91 Dolbear (D.D.), Jesse DeVore Sur. ..... Drlg. 2,400 ft.
The Texas Company's No. 7 Hannah (W.O.), 200 ft. out of SW cor. tract in Jesse DeVore Sur. ..... Pulling screen to deepen 4,842 ft.

MARKHAM—MATAGORDA COUNTY

Rycade Oil Corp.'s No. 4 Meyers, 250 ft. from S line and 125 ft. from E line of SW, Blk. 1, William Hadden Sur. ..... Pumping cotton seed hulls to plug cavity 3,088 ft.

PORT NECHES—ORANGE COUNTY

The Texas Company's No. 2 Polk-Kuhn-Glass, 350 ft. E and 100 ft. S of SW cor. of Marshall Beauchamp Sur. ..... Bldg. derrick.

REFUGIO—REFUGIO COUNTY

E. M. Jones' No. 1-B Mitchell (D.D.), 250 ft. NW of SE line and 250 ft. SW of Mission River ..... T.D. 9,134 ft.; plugged to 8,960 ft.; to test showing 8,910-60 ft.
Larco Oil & Gas Co.'s No. 2 Strauch, 650 ft. from S line and 200 ft. from E line of Lot 13, Sec. 12, Refugio town tract ..... Rig.
T. P. Morgan's No. 2 M. F. Lambert, 993 ft. from W line and 150 ft. from S line of lease in NE cor. of town tract ..... Rig.
Smith & Dougherty's No. 1 M. F. Lambert, Wm. Hews and L. Brown Sur., 4,350 ft. NE along NW line from SW cor. of United Prod. Corp.'s M. F. Lambert lease and thence 990 ft. SE at right angles ..... Derrick.

CLAY CREEK—WASHINGTON COUNTY

Nicholson Oil Corp.'s No. 1 Bimage, C of E½ of J. F. Perry Sur., 200 ft. from W line and 1,300 ft. from S line of 242-ac. tract ..... Shut down 1,600 ft.

SOUTH LOUISIANA FIELDS

JENNINGS—ACADIA PARISH

Reliable Oil Co.'s No. 1 Haber, 50 ft. N and 50 ft. W of SE cor., Lot 4, Blk. 12, Sec. 46-9s-2w ..... Sand and shale 1,909-27 ft.; pumped S.W.; shut down.
R. H. Hines' No. 3 Rawson & Haber, 1,800 ft. N and 400 ft. W of SE cor. of Sec. 46-9s-2w ..... Drlg. gumbo 1,201 ft.

SORRENTO—ASCENSION PARISH

Union Sulphur Co.'s No. 22 United Land Co., 4,050 ft. N and 760 ft. W of SE cor. of Sec. 15-10s-4e ..... Drlg. gumbo 620 ft.

IOWA—CALCASIEU AND JEFF DAVIS PARISHES

Magnolia Pet. Co.'s No. 2 Waite, 330 ft. out of NE cor. SE. Sec. 12-9s-7w ..... Sand and shale 5,506 ft.; cmtd. 9⅝-in. csg. to protect hole.
Shell Pet. Corp.'s No. 2 Fontenot, 225 ft. E and 325 ft. N of SW cor. of Sec. 7-9s-6w ..... Drlg. sand rock 1,624 ft.

EDGERLY—CALCASIEU PARISH

C. M. Crotty Oil Co.'s No. 7 Lillard (W.O.) ..... Set whipstock 2,824 ft.
Green Oil Co.'s No. 10 Moore (D.D.), 950 ft. S and 425 ft. E of NW cor. of Sec. 28-9s-11w ..... T.D. 3,070 ft.; set whipstock 2,775 ft. and milling out of casing to sidetrack.

LOCKPORT—CALCASIEU PARISH

Magnolia Pet. Co.'s No. 9 Bordages (W.O.), 319 ft. N and 90 ft. E of SW cor. of NW NE Sec. 8-10s-9w ... T.D. 6,900 ft.; plugged to 6,664 ft.; tested S.W.; to plug back higher.
Union Sulphur Co.'s No. 3 Martha Moss, 300 ft. W, 150 ft. S, NE cor. NW SE, Sec. 8-10s-9w ..... Set screen 5,365 ft.; tested S.W.; pulling screen to deepen.

SULPHUR—CALCASIEU PARISH

Union Sulphur Co.'s No. 750 fee (D.D.), Sec. 29-9s-10w.... Set 14 ft. 4½-in. screen 3,397 ft.; swabbing.
Union Sulphur Co.'s No. 769 fee, 295 ft. S, 918 ft. W of C of Sec. 29-9s-10w ..... Salt 6,053 ft.; sidetracked 3,343 ft. to sand 4,886-96 ft.; tested S.W.; set whipstock 4,725 ft.

Union Sulphur Co.'s No. 770 fee, 292 ft. S, 1,243 ft. W of center, Sec. 29-9s-10w ..... Location.
Union Sulphur Co.'s No. 772 fee, 146 ft. S, 882 ft. W of center, Sec. 29-9s-10w ..... Drlg. rock 2,112 ft.

VINTON—CALCASIEU PARISH

Gulf Ref. Co.'s No. 6 Gray, Sec. 33-10s-12w, 160 ft. W of No. 3 ..... No report.
Marra McLean's No. 14 Gray, Sec. 33-10s-12w, 88 ft. W and 30 ft. S of No. 4 ..... Drlg. gumbo 1,720 ft.
Vinton Pet. Co.'s No. 5 Matilda Gray (D.D.), 464 ft. W, 362 ft. N, SE cor. SW NE, Sec. 33-10s-12w..... T.D. 3,667 ft.; cutting and pulling liner at 2,288 ft.

BLACK BAYOU—CAMERON PARISH

Brownie-Babbette Oil Co.'s No. 1 Moore, 562 ft. W and 50 ft. S of NE cor. of E half SE of Sec. 18-12s-12w.. Sandy shale showing oil 6,619-32 ft.; preparing to set 7-in. csg. 6,600 ft.

HACKBERRY—CAMERON PARISH

Calcasieu Oil Co.'s No. 3 Unsurveyed Island, 1,120 ft. S and 225 ft. E of NW cor. of Sec. 24-12s-10w ..... Heaving shale 2,035 ft.
Calcasieu Oil Co.'s No. 35 Watkins, 360 ft. NE of No. 33 in line with No. 20 in NW cor. Sec. 24-12s-10w ..... Drlg. sticky shale 2,200 ft.
Lackawanna Oil Co.'s No. 1 Ellender, 320 ft. S and 150 ft. E of NW cor. of SE SE of Sec. 21-12s-10w ..... Derrick.
Moon Oil Co.'s No. 6 Sanner, 1,550 ft. N and 675 ft. E of SW cor. of Sec. 28-12s-10w ..... Drlg. 2,950 ft.
J. D. Sutton's No. 7 Irwin, 1,320 ft. N and 1,490 ft. W of SE cor. of Sec. 13-12s-10w ..... Drlg. sand 3,035 ft.
The Texas Co.'s No. 10 State, 2,376 ft. N, 564 ft. E, SE cor. Sec. 13-12s-10w, in Twp. 12s-9w..... Location.
Union Sulphur Co.'s No. 2 Gulf Land-Humble lease, 400 ft. W and 100 ft. S of No. 3 in Sec. 11-12s-10w ..... Rig.
Union Sulphur Co.'s No. 1 Gulf land (Pure Oil Co. lease), 1,958 ft. N, 400 ft. W of SE cor., Sec. 11-12s-10w ..... Sand showing oil 8,316-24 ft.; drill pipe stuck; sidetracking 5,981 ft.

Yount Lee Oil Co.'s No. 11 School land, 2,810 ft. W and 1,608 ft. N, SE cor., Sec. 15-12s-10w ..... Hard sand 4,205 ft.

CHOCTAW—IBERVILLE PARISH

Standard Oil Co.'s No. 3 Myrtle Grove, Sec. 52-9s-11e, 400 ft. S and 50 ft. W of No. 1 ..... Derrick.

WHITE CASTLE—IBERVILLE PARISH

Shell Pet. Corp.'s No. 6 Wilbert, Sec. 9-11s-12e, 200 ft. out from No. 5 ..... Rig.

PORT BARRE—ST. LANDRY PARISH

Gulf Ref. Co.'s No. 2 Wilson & Cockran, Sec. 4-6s-5e, 600 ft. N of No. 1 ..... No report.

STARKS—CALCASIEU PARISH

Emerson & Starks' No. 1 Industrial, 385 ft. S and 275 ft. E of NW cor. of SW NE of Sec. 30-9s-12w ..... No report.

SWEET LAKE—CAMERON PARISH

Pure Oil Co.'s No. 11 Yount Lee, Sec. 12-13s-8w, 800 ft. S 66 deg. 42 min. from No. 9 ..... Location.

LEESVILLE—LA FOURCHE PARISH

The Texas Co.'s No. 5 L.L.&E., 2,888 ft. S, 105 ft. E of NW cor. of Sec. 26-21s-22e ..... Pulling screen to deepen 3,663 ft.

MISCELLANEOUS WILDCATS

TEXAS

AUSTIN COUNTY

Great Southern Oil Co.'s No. 1 Schevojas, 329 ft. N, 78° E of N cor. B. Dottery Sur. ..... Shut down 3,760 ft.

BRAZORIA COUNTY

John Deering's No. 1 C. W. Chapman, 394 ft. from S line and 104 ft. from E line of Lot 2, Andrew Robinson Sur. ..... Shut down 4,485 ft.

J. R. Ingram's No. 2 Levitt, John Peske Sur., 75 ft. NW of No. 1 ..... Standing 2,185 ft.
Shell Pet. Corp.'s No. 5 Blakely-Winston, Danbury, 1,410 ft. N 63° and 1,200 ft. N 27° W of SW cor. of H.T.&B. Sur. No. 14 ..... Spudded.
The Texas Company's No. 3 Belcher, Manvel, Harvey N. Little Sur., 1,220 ft. southwesterly and 200 ft. southeasterly out of N cor. of Belcher lease ..... Coring sand 4,009 ft.

BURLESON COUNTY

Bell & Knob's No. 2 Polansky, M. B. Lawrence Sur., 369 ft. from E line and 469 ft. from N line of 158-ac. tr. ..... Shut down 650 ft.
E. M. Bracey et al's No. 1 Bracey, J. Lastly Sur., 880 ft. from E cor. of P. Taylor 110 acres, SE along NE line of J. G. Houston 160 acres, thence 180 ft. at right angles in 3-acre tract ..... No report.
Marek & Son's No. 3 A. Marek, N. McFaddin Sur., 1,068 ft. N and 225 ft. W of SE cor. of tract ..... Standing 2,210 ft.
Sampson Oil & Gas Co.'s No. 2 Duckworth & Gilley, SE cor. of P. Singleton Sur., 700 ft. E of No. 1 ..... Rigging up.
J. E. Stubblefield et al's No. 1 Mitchell, A. T. Woolridge Sur., 81 ft. SW and 4,340 ft. SE of S cor. of Joseph Henson Sur. ..... Gumbo 600 ft.; standing

COLORADO COUNTY

Bunte and Shell Pet. Corp.'s No. 1 Rudolph Matuska, Joshua Henneke Sur., 700 ft. S of most northerly NW cor. in C E and W of 130-acre tract ..... Rig.
Smith, Adair et al's No. 1 Barnett, 230 ft. from W line and 330 ft. from S line of Blk. 26, Q. K. Winn Sur. ..... Black shale 4,345 ft.; standing.

FORT BEND COUNTY

Naylor & DeCosta's No. 1 Naylor, 6,350 ft. N, 55 deg. E from SW cor. 653-acre tract in Christman Sur. ..... T.D. 5,850 ft. (est.); to run 5,700 ft. 9⅝-in. csg.
North Star Pet. Co.'s No. 1 Guyler, Andrew Roberts Sur., 330 ft. out of SW cor. of 100-acre tract ..... Drlg. gumbo 750 ft.
Stone & Wyman's No. 1 Beard, H.&T.C. Sur. No. 118, 1,150 ft. from NW line, 1,892 ft. from NE line ..... No report.

GALVESTON COUNTY

Humble Oil & Ref. Co.'s No. 1 Rosenkranz, Green's Bayou, center N half of Lot 10, Sarah White Sur. ..... Rigging up.

GRIMES COUNTY

Barnett et al's No. 1 Dodd, Timothy Jones Sur. ..... Shut down 2,670 ft.
W. J. Brightwell's No. 1 Combs, Samuel Beauman Sur., 350 ft. from S line and 622 ft. E of extreme W line of 276-acre tract ..... Derrick.

HARDIN COUNTY

W. R. Alexander et al's No. 1 Southwestern Lbr. Co., 150 varas W of C of E line of Mary K. Sherman Sur. ..... Drlg. sticky shale 2,487 ft.
Houston Oil Co. and Republic Prod. Co.'s No. 1 Ariola fee, 3,660 ft. from N line and 9,700 ft. from E line of Ariola Sur. ..... Sand showing oil 3,262-86 ft.; cmtd. 9⅝-in. csg. 3,259 ft.; drlg. plug.
Houston Oil Co.'s No. 1 Ariola fee, 3,000 ft. from N line and 5,610 ft. from W line of Ariola Sur. ..... Location.
Houston Oil Co.'s No. 2 Ariola fee, 3,000 ft. from W line and 5,610 ft. from N line of Ariola Sur. ..... Location.
Houston Oil Co.'s No. 3 Ariola fee, 5,610 ft. from W line and 5,610 ft. from N line of Ariola Sur. ..... Location.
Joe E. Proctor's No. 1 Russell & Teagle, 2,650 ft. E. and 2,777 ft. N of NW cor. of Wm. W. Young Sur. ..... Drlg. shale 2,312 ft.

HARRIS COUNTY

Bayou Oil Co.'s No. 1 Hall, 350 ft. from N line and 970 ft. from E line of Wm. Hodge Sur. ..... Drlg. shale 1,412 ft.
T. V. Buckholve & Sons' No. 1 Miller, Arthur McCormick Sur. ..... No report.
John Deering's No. 1 Warren, Hockley T. Snell Sur., 100 ft. due south of The Texas Co.'s No. 3 Warren ..... Drlg. gumbo 2,415 ft.
H. D. Morse et al's No. 1 Schiveinle, Wm. White Sur., 900 ft. S 80° W of NW cor. of Lienberger 20-ac. tract in Blk. 1 ..... Shut down 3,612 ft.
Victor Smith's No. 1 Dr. Griffith, S. Bell Sur., 582 ft. from E line and 60 ft. from N line of 250-acre tract ..... Standing 225 ft.

JASPER COUNTY

Next Drlg. Co.'s No. 1 Flourney, B. F. Jones Sur., 900 ft. NW of Helmerich & Payne's No. 1 Flourney ..... Shut down 4,521 ft.
Rio Neches Oil Co.'s No. 4-A Boykin, M. Rackie Sur., 400 ft. E of No. 3-A ..... Abnd. 1,310 ft.
Rio Neches Oil Co.'s No. 5-A Boykin, M. Ruchi Sur., 300 ft. SE of No. 1-A ..... Drlg. 300 ft.

JEFFERSON COUNTY

Coastal Oil & Gas Co.'s No. 1 Young, Joseph Grigsby Sur., 250 ft. from E line and 160 ft. from S line of 40-acre tract in Block F-5, Lot 6 ..... Drlg. gumbo 802 ft.
Elam & Pipkin's No. 2 Broussard, John McGaffey Sur., 150 ft. due E of No. 1 ..... Shut down 1,855 ft.
Jack Schultz' No. 2 Todd, Cheek, 1,800 ft. S of No. 1 and 130 ft. E of W line of Wm. Carr Sur. ..... Rigging up.

LIBERTY COUNTY

Leon Brisley's No. 1 J. M. Neal, Edward Tanner Sur., 1,800 ft. E, 1,300 ft. N of most westerly NW cor. of Margaret Evans Sur. ..... Drlg. shale 1,822 ft.
Mayes et al's No. 1 Dunman, J. C. Martin Sur., 1,111 ft. from S line of survey and 2,360 ft. W of Trinity River ..... Spudded.

MATAGORDA COUNTY

Danciger Oil & Gas Co.'s No. 1 W. C. Hunt, Pledger, 5,220 ft. from N line and 6,500 ft. from E line of W. Colrson Sur. ..... Rig.
Dr. Griffith et al's No. 3 Baer, Big Hill, 5,000 ft. N, 3,000 ft. E from SW cor. of Seth Ingram Sur. ..... T.D. 2,720 ft.; cmtd. string of combination 6 and 4-in. csg. 2,700 ft.; drld. plug and tested S.W. to reset; standing.
Shepherd's Mott Salt Dome Oil Co.'s No. 1 Hawkins, Shepherd's Mott, 5,268 ft. from N line and 1,320 ft. from E line of B. McCarthy Sur. ..... Drlg. sand shale 4,987 ft.
United North & South Oil Co.'s No. 1 Stoddard, J. C. Keller Sur., 150 ft. W and 545 ft. N of SE cor. Blk. 63, Buckeye Townsite ..... Drlg. hard shale and lime 7,893 ft.

MONTGOMERY COUNTY

Alpha Oil Co.'s No. 1 Dunn, C of N 20 ac. of S 50 ac., W. N. Real Sur. ..... Drlg. sand and boulders 1,085 ft.
Craft & Gesieke's No. 2 South Tex. Dev. Co., center T.&N.O. Sur., Blk. 5 ..... Location.
Craft & Gesieke's No. 1 South Tex. Dev. Co., T.&N.O. Sur., Blk. 9 ..... Shut down 4,996 ft.
Craft & Gesieke's No. 1 Keystone Mills, 300 ft. out of NE cor. of A. S. James (T.&N.O. No. 4) Sur. ..... Cmtd. 10-in. csg. 325 ft.
Gulf Coast Drlg & Prod. Co.'s No. 1-B South Texas Dev. Co., 466 ft. out of NE cor. 40-acre lease on dividing line of Theo. Slade and lower Alex McCown Sur. ..... Spudded.
Hamilton et al's No. 1 Gilbert, John Davis Sur., 256 ft. from W line and 465 ft. from S line of 46-acre tract. Drlg. shale 5,195 ft.
Heep Oil Corp.'s No. 2 Cartwright Sur., John Davis Sur., 330 ft. from S line, 400 ft. from E line of tr. Set 24 ft. 10 in. of 5 3/16-in. screen 5,146 ft.; comp. flowing 1,000 bbls. daily.
Humble Oil & Ref. Co.'s No. 1 C. L. Dobbins, Ransom House Sur., 425 ft. from N line and 466 ft. from W line of tract ..... Coring sandy shale showing oil and gas 4,710 ft.
Humble Oil & Ref. Co.'s No. 4 South Tex. Dev. Co., 1,900 ft. N from SE cor. of T. C. Howell Sur., thence 466 ft. W at right angles ..... Drlg. sticky shale 4,520 ft.
Humble Oil & Ref. Co.'s No. 5 South Texas Dev. Co., Theo. Slade Sur., 330 ft. S of S line of Gulf Coast Drlg. & Prod. Co.'s 60 ac. and due S offset latter's No. 1 ..... Derrick.
Humble Oil & Ref. Co.'s No. 6 South Texas Dev. Co., Theo. Slade Sur., 335 ft. from S line of survey and due N offset Heep Oil Corp.'s No. 1 Hamman ..... Location.
Humble Oil & Ref. Co.'s No. 7 South Texas Dev. Co., Theo. Slade Sur., 331 ft. S of S line of Martin & Dewey 30-ac. tract and 330 ft. W of SE cor. ..... Location.
Humble Oil & Ref. Co.'s No. 8 South Texas Dev. Co., Theo. Slade Sur., 330 ft. E of E line and 331 ft. N of S line of Martin & Dewey 30 ac. ..... Location.
Humble Oil & Ref. Co.'s No. 9 South Texas Dev. Co., Theo. Slade Sur., 330 ft. E and 328 ft. N of SE cor. Gulf Coast Drlg. & Prod. Co.'s 60 ac. ..... Location.
Humble Oil & Ref. Co.'s No. 1 Cartwright, John Davis Sur., 330 ft. from N line, 466 ft. from E line of 248.9-ac. tract ..... Drlg. shale and lime 2,006 ft.
Humble Oil & Ref. Co.'s No. 2 Cartwright, John Davis Sur., 466 ft. E of W line and 466 ft. S of N line of tract ..... Derrick.
Lilly and Red Moon Oil Co.'s No. 1 Stella McDonald, John Davis Sur., 241½ ft. from E line, 202.8 ft. from S line of 5-ac. tract ..... Drlg. sticky shale 525 ft.
Lowrie & Young's No. 1 C. A. Damuth, approx. 5,430 ft. from E line and 3,018 ft. from S line of T. J. Nichols Sur. ..... Drlg. sandy shale 3,112 ft.
Miller Prod. Co.'s No. 1 Foster Lbr. Co., M. B. Lawrence Sur., 2,640 ft. from N line and 300 ft. from E line of 412-acre tract ..... Rig.
Moore et al's No. 1 Bruton, L.&G.N. Sur., 466 ft. out of NE cor. 46-acre tract ..... Sand showing oil and gas 4,983-5,018 ft.; running casing.
Pevehouse Oil Co.'s No. 1 Sealey, Jas. Pevehouse Sur., 1,575 ft. N of N line of Horton & Woodson's 1,562-acre tract and 2,226 ft. E of W line of H.&W. 1,870-acre tract ..... Shut down 3,984 ft.
Rowe & Flowers' No. 1 Varner, R. House Sur., 330 ft. out of NE cor. of 33-ac. tr. ..... Changing rigs to deepen; previously reported abnd. in salt water sand 5,247-55 ft.
Rowe & Flowers' No. 1 Alexander, 330 ft. out of SE cor. Lot 20 in the NW A. McCown Sur. ..... T.D. 5,254 ft.; plugged to 5,100 ft.; drill stem stuck.
C. C. Steinberger et al's No. 1 Steinberger, John Davis Sur., 450 ft. from N and W lines of the 250-ac. tract. Sand 5,060-80 ft.; 7-in. csg. at 5,058 ft.; drld. plug to set screen.
Strake Oil Corp.'s No. 3 South Tex. Dev. Co., 2,475 ft. from W line and 790 ft. from S line of Theo. Slade Sur. ..... Tested salt water 5,200 ft.; drlg. sand 5,512 ft.; to drill to 6,000 ft.
Sutton-Hawkins' No. 1 Foster, Rosea de la Garza Sur., 3,333 ft. N and 1,320 ft. E of NE cor. of W. J. Johnson 100-ac. tract ..... Derrick.
The Texas Company's No. 1 Moody, 1,400 ft. easterly and 466 ft. southerly out of NW cor. of Moody 494-acre lease, Ranson House Sur. ..... Rig.
R. H. Vice's No. 1 S. L. Ross, Jose Maria De La Garza Sur., 1,777 ft. N and 344 ft. E of SW cor. 97-acre tract ..... Drlg. shale 3,228 ft.

NEWTON COUNTY

L. A. James et al's No. 1 Price, T.&N.O. Sur., 1,000 ft. from W line and 500 ft. from N line of tract ..... Drlg. sticky shale 1,215 ft.
Sun Oil Co.'s No. 1 Peevey Moore Lbr. Co., 2,145 ft. from S line and 1,225 ft. from W line of F. Stoevar Sur. No. 4 ..... Drlg. shale 2,817 ft.

ORANGE COUNTY

Altex Oil Co.'s (Veteran Oil Co.) No. 1 Reed, A. Nelson Sur. No. 1, 500 ft. from N line and 250 ft. from E line of tract ..... Set 10-ft. blank and 15 ft. of 4½-in. screen 4,808 ft.; tested salt water; shut down.

POLK COUNTY

Anderson et al's No. 1 Duke, Peter J. Manard Sur., 330 ft. out of NW cor. of 235-acre tract ..... Cmtd. 15-in. csg. 40 ft.
Coch & Stevens' No. 1 Ruth Lawrence, Castillian Sur., 300 ft. from W line and 790 ft. from S line of 54-acre tract ..... Drlg. 1,402 ft.
W. H. Freeman's No. 2 Freeman, A. Viesca Sur. ..... No report.
Dick Schwabb's No. 1 Carlton Davis, A. Viesca Sur., 350 ft. out of most northerly SE cor. A. E. Munson 101-acre tract ..... Location.
Tony & Purdy's No. 1 Martha Roberts, Joaquin T. De Rumayor Sur. ..... Spudded and shut down.

REFUGIO COUNTY

Gulf Prod. Co.'s No. 1 J. O'Connor, C.E.P.I.&M. Sur., 1,200 ft. from S line and 1,500 varas from E line of tract ..... No report.
Humble Oil & Ref. Co.'s No. 1 O'Connor (D.D.), 6,013 ft. S from NE cor. along SE line of Lon T. Rios Sur., thence 7,375 ft. W at right angles in John Keating Sur. ..... Shut down 5,972 ft.
Humble Oil & Ref. Co.'s No. 2 O'Connor, John Keating Sur., 12,625 ft. N of S line at right angles and 8,158 ft. W of E line at right angles ..... T.D. 5,748 ft.; set whipstock 2,300 ft. to sidetrack.

SAN JACINTO COUNTY

Joe L. Pace's No. 1 Foster Estate, H.&T.C. Sur. No. 3, 2,640 ft. from E line and 1,940 ft. from S line survey. Derrick.

TRINITY COUNTY

C. N. Beckner's No. 1 Mangum, J. A. Henderson Sur., 200 ft. out of NE cor. 80-acre tract ..... Shut down 1,374 ft.
Joseph M. Weaver's No. 1 Thompson, 150 ft. out of NE cor. of I.&G.N. Sur., No. 47 ..... S.D. 3,556 ft.

TYLER COUNTY

Allied Pet. Co.'s No. 3 Wilson, 1,500 varas from W line and 600 varas from N line of Mrs. E. Cheny Sur., Abst. 798 ..... T.D. 5,146 ft.; preparing to resume operations after shutdown for year.

VICTORIA COUNTY

Bunte et al's No. 2 Keeran, Martin DeLeon Sur., 300 ft. E of No. 1 ..... Set 10 ft. of 4½-in. screen 5,851 ft.; comp. flowing 1,000 bbls. P.L. oil daily, 425 lbs. pressure, ½-in. choke; shut-in pressure 875 lbs.; gravity 33.3 deg.
Cullen & West's No. 1 Keeran ranch, Martin DeLeon Sur., 450 ft. from S line, 450 ft. from W line of tr. ..... Salt water sand 6,606 ft.; a'nd.
Houston Oil Co.'s No. 1-A McFaddin, 200 ft. from NE line, 240 ft. from SE line of I.R.R. Sur. No. 20 ..... T.D. 5,292 ft.; plugged to 1,673 ft.; drlg. sidetracked hole 3,879 ft.
Humble Oil & Ref. Co.'s No. 1 Pete Rydolph, John Kemper Sur., 2,617 ft. from E line and 1,013 ft. from W line of lease ..... Drlg. sandy shale 4,006 ft.
The Texas Company's No. 3 McFaddin (W.O.), S 15° W 6,200 ft., N 75° W 1,850 ft. from NE cor. John M. Rine Sur. ..... Rigging up to work over 5,835 ft.
Union Oil Co.'s No. 1 Keeran, 4,166 ft. SW along SE line of Gulf Prod. Co.'s 2,500-ac. lease from most easterly cor., thence 1,390 ft. SE at right angles in Martin DeLeon Sur. ..... Drlg. sand and shale 5,290 ft.

WALKER COUNTY

W. E. Brown's No. 1 Horshall, 150 ft. out of SE cor. of E. Miller Sur. ..... Shut down 2,011 ft.
Hart Oil Co.'s No. 1 Thompson Lbr. Co., Jose Ortega Sur., 1,265 ft. S, 1,576 ft. W of SW cor. of J. B. Gibson's 71-acre tract ..... Shut down 2,099 ft.
Geo. F. Kerr's No. 1 Smithers Bros., S. Manning Sur. ..... Abnd. 3,650 ft.

WALLER COUNTY

McDaniel and associates' No. 1 Citizens State Bank, B.B.B.&C. Sur., C of 150-acre tract ..... **No report.**

Seven Wells Oil Corp.'s No. 1 Maxwell, Justo Liendo Sur., 225 ft. from N line and 492 ft. from W line of 84-acre tract ..... **Drlg. shale 2,832 ft.**

WASHINGTON COUNTY

M.O.&T. Corp.'s No. 1 Giddings, S. Young Sur., 200 ft. from S line and 150 ft. from W line of 698-acre tract ..... **Derrick.**

WHARTON COUNTY

Gantt et al's No. 1 Laura Hahn, N. Manch Sur., 330 ft. out of NE cor. 142.17-ac. tract ..... Rigging up.

SOUTH LOUISIANA

ASCENSION PARISH

Rio Bravo Oil Co.'s No. 1 Community Lease, Darrow, 300 ft. from N line and 1,500 ft. E at right angles from SW cor. of Sec. 15-10s-2e ..... **Gumbo 1,562 ft.; losing returns.**

BEAUREGARD PARISH

DeRidder Dev. Co.'s No. 1 McMahon, 200 ft. W and 156 ft. S of NE cor. of NW of Sec. 33-3s-9w ..... **Gumbo 1,286 ft.**

EVANGELINE PARISH

Emile LeDeau's No. 1 Vidrine, 200 ft. W and 350 ft. S of NE cor. of Sec. 47-3s-3e ..... **Shut down 1,420 ft.**

IBERIA PARISH

Warrick Oil Co.'s No. 1 Bernard, 912 ft. N and 150 ft. E of SW cor. of Sec. 54-12s-7e ..... Pulling screen to deepen 2,988 ft.

JEFFERSON DAVIS PARISH

D. C. Gillette's No. 1 J. A. Jester, 2,487 ft. S and 1,800 ft. W of NE cor. of Sec. 27-8s-3w ..... Drlg. 3,755 ft.

Little City Oil Co.'s No. 1 Jennings Norwood, 1,975 ft. N and 675 ft. E of SW cor. of Sec. 44-9s-3w ..... Drlg. 3,410 ft.

PLAQUEMINES PARISH

Lake Washington-Freeport Sulphur Co.'s No. 2 Cockrell-Moran, Sec. 14-20-26e, 1,218 ft. N and 4,396 ft. E of station ..... **Sulphur test.**

Lake Washington-Freeport Sulphur Co.'s No. 1 Louisiana State, 598 ft. N and 1,339 ft. E of station ..... **Sulphur test.**

TERREBONNE PARISH

The Texas Company's No. 7 State-Lake Pelto, 2,216 ft. N. 104 ft. W of SE cor., Sec. 8-23s-18e ..... **Derrick.**

The Texas Co.'s No. 16 State-Lake Barre, 1,500 ft. S. 150 ft. E of NW cor., Sec. 36-21s-19e ..... **Drlg. 2,406 ft.**

The Texas Company's No. 17 State-Lake Barre, 1,476 ft. W and 626 ft. S of NW cor. of Sec. 20-21s-20e ..... Driving piling.

The Texas Company's No. 3 Lake Barre-L.L.&E., 3,520 ft. S and 110 ft. E of NW cor. of Sec. 20-21s-20e .... **Drlg. hard lime 3,100 ft.**

VERMILLION PARISH

Pure Oil Co.'s No. 1 Mulvey Irrigation (Gueydan), L-170.9 ft. from N line and 2,252.5 ft. from W line of Sec. 34-11s-1w ..... **Drlg. broken hard sand and lime 3,777 ft.**

VERNON PARISH

Minerals Division Llano Co.'s No. 1 Llano Del Rio, 543 ft. E and 300 ft. S of NW cor. of NW of Sec. 34-3n-9w ..... **Shut down 1,290 ft.**

WEST FELICIANA PARISH

Putnam Synd.'s No. 1 Como Plantation, Sec. 51-1s-14w.. Shut down 2,449 ft.

Wildcat Operations in Southwest Texas

(Continued from Page 64)

BELL COUNTY

Alex Krause' No. 1 W. P. Edds, 650 ft. from S line, 150 ft. from W line of 100-acre tract in M. Moreno Sur. ..... T.D. 500 ft.; S.D.

BEXAR COUNTY

Amsden-Ingersoll-Miller's No. 1 Strumberg, 450 ft. to W line, 1,920 ft. to N line of tract, 12 miles SW of San Antonio ..... T.D. 1,040 ft.; set 4½-in. csg.

S. W. Blount's No. 1-A S. A. Land & Dev. Co., 10 ft. from No. 1 in I. Perez Sur. ..... T.D. 900 ft.; no report.

Eckert et al's No. 1 Edwards, 150 ft. to N and W lines of farm in Martines Sur. ..... T.D. 1,930 ft.; standing.

Linda Oil Co.'s No. 1 John and R. S. Watson, 600 ft. from S line, 150 ft. from E line of 200.7-ac. tract in Cruise Landin Sur. ..... Location.

Moore-Jauer's No. 1 Holly R. Ellison, 2,916 ft. from E line, 1,500 ft. from S line of farm in T. York Sur... T.D. 1,953 ft.; standing.

Dr. Ewell Neil's No. 1 J. Watson, 500 ft. from W line, 1,700 ft. from S line of B. Martines Sur. ..... T.D. 2,495 ft.; in Edwards dry.

Jones & Voltz' No. 1 Bonkowsky, 150 ft. to N and W lines of William McMenenes Sur., 12 miles E of San Antonio ..... T.D. 907 ft.; standing.

Schneider, Ress et al's No. 2 Claussen, 13 miles NE of San Antonio ..... T.D. 1,330 ft.; S.D.

C. J. Webster Oil & Gas Co.'s No. 1 San Antonio Suburban Irrigated Farms, 200 ft. from S and W lines of Farm Lot 2, Blk. 49, in SW Bexar County ..... T.D. 853 ft.; drlg.

BROOKS COUNTY

M. P. Evans' No. 1 J. M. Martines, 200 ft. from N and W lines of Blk. 11, Sec. 6, La Encantada Sur. ..... T.D. 1,480 ft.; standing.

CALDWELL COUNTY

Cargill et al's No. 1 Dameron, 150 ft. from N and W lines of 72-5-ac. tract in Dillard Cooper Sur. ..... Derrick.

E. D. Herne's No. 1 M. C. and P. W. Jeffrey 126-ac. tract, 150 ft. from N and E lines of tract in James George Sur. ..... Spudded in and S.D.

DE WITT COUNTY

J. F. Richardson's No. 1 Virginia Taylor, 330 ft. from SE line of tract, 330 ft. NE of Minnehuilla Creek .... T.D. 3,300 ft.; standing.

DIMMITT COUNTY

Motes-Campbell Co.'s No. 1 Denton, 150 ft. from E line, 250 ft. from S line of Tracts 33 and 34 in Sec. 60 of Denton Colony Subd. ..... T.D. 200 ft.; drlg.

DUVAL COUNTY

J. E. Anderson's No. 1 Wood-Welder, 1,400 ft. from E line, 400 ft. from N line of Sur. No. 73 ..... Location.

Buchanan & Frates' No. 1 Hagist, cen. of SW Sur. 267 ... T.D. 3,144 ft.; set csg.

Clark & Cowden's No. 1 J. M. Richardson, 3,268 ft. from S line, 200 ft. from E line of Sur. No. 5 ..... Rigging up.

Delange & Frates' No. 1 Sevier, 1,845 ft. from N line, 2,945 ft. from W line of Sur. 213 ..... Location.

Frank Gravis' No. 2 Schallert in Sur. 258 (Palangano salt dome) ..... T.D. 1,100 ft.; standing.

O. W. Killam's No. 1 Peters, 150 ft. from E line, 450 ft. from N line of SE of Sur. No. 1 ..... T.D. 2,725 ft.; standing.

J. A. Leindecker's No. 1 G. W. Sutherland, 560 ft. from S line, 450 ft. from W line of Survey No. 183 ..... Rigging up.

Payne & Vernon's No. 1 A. Roach, 865 ft. from E line, 45 ft. from S line of Blk. 7, Sur. No. 457 ..... Derrick.

Plymouth Oil Co.'s No. 1 Parr, 6,250 ft. from W line, 1,925 ft. from S line of San Andres, Garcia grant ... T.D. 5,800 ft.; standing.

GUADALUPE COUNTY

B. E. Brock's No. 1 Ogletree, 1,600 ft. from W line, 450 ft. from S line of tract in Robert Smith Sur. ..... T.D. 1,785 ft.; drlg.

GOLIAD COUNTY

Hoffman & Gooch's No. 1 Fromme, 600 ft. from N and 1,200 ft. from W line of Peter B. Dexter Sur. ..... T.D. 2,470 ft.; standing.

Plymouth Oil Co.'s No. 3 Parks, 400 ft. S of No. 1 Parks in Solomon Parks Sur. ..... T.D. 5,240 ft.; drlg.

Rowan & Hope and Phillips Pet. Co.'s No. 1 Irby, 6,500 ft. from E line, 3,000 ft. from N line of 2,080-ac. tract in Ybarbo Sur. ..... Location.

GONZALES COUNTY

Johnson & Mattock's No. 1 J. James, 12 miles NE of Gonzales city, 900 varas from E line, 300 ft. from S line of tract in M. A. Williams Sur. ..... T.D. 3,269 ft.; abnd.

Luling Oil & Gas Co.'s No. 1 J. L. Dubose, 870 ft. from S line, 450 ft. from E line of 100-ac. tract in F. R. Whitner Sur. ..... Location.

Luling Oil & Gas Co.'s No. 1 J. L. Dubose, 870 ft. from S line, 450 ft. from E line of 100-ac. tract out of 295-ac. tract in F. R. Whitner Sur. ..... Set surface csg.

HIDALGO COUNTY

Barrett-Kanellos' No. 1 J. B. Brock, 7 miles W and N from Mission (on Monte Cristo road) ..... T.D. 4,590 ft.; S.D.

San Roman Oil Co.'s No. 1 J. T. Lomax, 7,500 ft. from S and E lines of San Roman Sur. ..... T.D. 675 ft.; S.D.

Dayle L. Smith's No. 3 Daskam, SW part of county ..... T.D. 1,726 ft.; S.D

JIM HOGG COUNTY

Clark & Cowden's No. 1 E. Vela, Share 1 El Peyote grant. Rigging up.

D. C. DeWitt's No. 1 Gomez, 1,110 ft. from N line, 150 ft. from W line of Sur. No. 12, SW part of county ... T.D. 1,457 ft.; to drill deeper.

JIM WELLS COUNTY

Catlett & O'Neal's No. 2 H. D. Miller, 2,200 ft. N and 83 deg. E of most southwesterly cor. of ranch ..... T.D. 700 ft.; drlg.

P. A. Lain's No. 1 Vernon Porter, 800 ft. from S line, 400 ft. from W line of 200-ac. tract in Sur. 25 ..... Rebuilding derrick.

Mid-States Oil & Gas Co.'s No. 1 Wade, C Blk. 3, Wade ranch, NE part of county ..... Location.

KARNES COUNTY

A. E. Edmiston's No. 1 O. L. Cochran, 150 ft. from S line, 500 ft. from E line of farm in D. B. McConnell Sur. ..... T.D. 2,014 ft.; drlg.

Ike Howeth et al's No. 1 D. Fargmann in Victor Blanco Sur., 660 ft. NE along county road from NE cor. of F. Heer tract, thence 50 ft. NW at right angles .. T.D. 4,048 ft.; drlg.

Nichols Oil Co.'s No. 1 Newberry, 210 ft. S, 60 deg. E from Fort Bend Oil Co.'s No. 1 Newberry ..... T.D. 3,300 ft.; S.D.

Pickett et al's No. 1 D. E. Lyons in Victor Blanco Sur. ... T.D. 3,422 ft.; to drill deeper.

KERR COUNTY

Eastland Oil Co.'s No. 1 Love, 600 ft. E of No. 1 Love in J. Martinez Sur. No. 1,594 ..... T.D. 2,453 ft.; shutting out water.

Evans & Gant's No. 1 E. Young, A. E. Burg Sur. 28 .... T.D. 1,312 ft.; standing.

Verde O. & G. Co.'s No. 1 J. D. Witt, 1,320 ft. from N line, 1,220 ft. from W line of Sec. 1,923, Hamilton Sur., 4 miles from Center Point; T.D. 200 ft.; carried to this depth and abandoned as Herber Oil Co.'s No. 1 J. D. Witt ..... T.D. 110 ft.; standing.

KLEBERG COUNTY

H. Carter's No. 1 R. H. Simmons, 150 ft. from S and W lines of tract in Sec. 7, King Sur. No. 3 ..... T.D. 3,205 ft.; resuming drlg.

LIVE OAK COUNTY

J. A. Harper's No. 1 fee, 2,130 ft. to N line, 510 ft. to E line of farm, J. Pointevant Sur. 27 ..... T.D. 5,674 ft.; fishing.

LEE COUNTY

Paton Bros.' No. 1-A Turner, 24 ft. from No. 1 Turner ... T.D. 5,595 ft.; drlg.

MEDINA COUNTY

James Earle Greenlee's No. 1 J. P. Nixon, 150 ft. S of C of N line of S half of NW of M. Derungs Sur. No. 528 ..... Spudded in.

Robertson Drilling Co.'s No. 1 Little, 2,350 ft. from N line, 1,500 ft. from E line of E. B. Rutledge Sur., southern part of county ..... T.D. 2,588 ft.; drlg.

MILAM COUNTY

M. W. Eiser's No. 1 Citizen's Nat. Bank of Waco, 1,325 ft. from S line, 625 ft. from E and W lines of tract in Wm. Punchard Sur. ..... T.D. 730 ft.; drlg.

Glass et al's No. 1 Ellison, 700 ft. from N line, 1,350 ft. from W line of 200-acre tract in Samuel Frost Sur. .. T.D. 550 ft.; drlg.

Keyser & Nichols' No. 2 Irwin, 65 ft. from No. 1, Levi Taylor Sur. ..... Set csg. 590 ft.; S.D.

Keyser & Roberts' No. 3 Ward, 125 ft. NE of No. 2 Ward, in Levi Taylor Sur. ..... T.D. 1,315 ft.; S.D.

Michalk & Clark's No. 1 Johnson, 60 ft. S of No. 1 Johnson on 100-ac. lease in Juan Jose Acosta Sur. .. T.D. 1,952 ft; drlg.

SAN PATRICIO COUNTY

John F. Camp's No. 1 W. W. Bennett, C SW of Sec. 8, Geo. H. Paul Subd., J. J. Welder ranch ..... T.D. 4,594 ft.; setting csg.

STARR COUNTY

Coastal O. & G. Co.'s No. 1 Kelsey Bass, 448 ft. to N line, 150 ft. to W line of Tract 52, Sur. 2, Porcion 86 .. T.D. 989 ft.; standing.

W. T. Gilman & Travelers Oil Co.'s No. 1 C. Ramos, 1,170 ft. from SW line, 1,470 ft. from NW lines of Sur. No. 150 ..... Spudded in and S.D.

H. C. Carter's No. 1 Gonzales, 990 ft. from N line, 1,150 ft. from E line of Share 62-B of Subd. of Porciones 70 and 71, Jurisdiction Mier ..... T.D. 340 ft.; standing.

Jeffries and Lambeth Drilling Co.'s No. 1 Starr County Cattle Co., 11,572 ft. from N line, 2,490 ft. from E line of Porcion 89, Jurisdiction of Camargo ..... Location.

Lackawanna Oil Corp.'s No. 1 V. Guerra, 657 ft. from NE line, 763 ft. from SE line of Blk. 13, Subd. of 2,000-acre tract out of Porciones 55 and 56 ..... Location.

Matthew & Chitty's No. 1 R. E. Monroe, 400 ft. from E line, 280 ft. from S line of tract in Share 3-B, Porcion 70 ..... Location.

John Pope, trustee's No. 1 H. Gonzales, 150 ft. from S line, 450 ft. from W line of Survey No. 339 .. ....T.D. 170 ft.; small gas well.

Raddig, Davis & Bowers' No. 1 M. Guerra in Porcion 110 ..... T.D. 245 ft.; drlg.

Smith et al's No. 1 Lopez, 200 ft. from E line, 1,000 ft. from S line of Blk. 20, Share 65 of Porcion 80, Jurisdiction Camargo ..... T.D. 300 ft.; standing.

George Stobaugh's No. 1 Seabury et al, 150 ft. from S and W lines of Porcion 107 ..... T.D. 278 ft.; drlg.

Stryalis Oil Corp.'s No. 1 H. Garza, 500 ft. from E line, 5,280 ft. from N line of Share 26, Partition of Porciones 67-72 ..... Location.

E. L. Williams' No. 1 L. G. Madrigal, 150 ft. from N and W lines of Share 5-A of Porcion 72 of Jurisdiction of Mier ..... T.D. 332 ft.; drlg.

TRAVIS COUNTY

Fritz Fuchs' No. 1 Swedish, 2,350 ft. from NE line, 750 ft. from NW line of Thomas Smith Sur. ..... T.D. 1,598 ft; S.D.

Ray & Orth's No. 1 Lundgren, 550 ft. from N line, 150 ft. from W line of 133-ac. tract in L. Kimbro Sur. .. T.D. 550 ft.; fishing.

WEBB COUNTY

Blair & Livingston's No. 1 J. M. Garcia, 150 ft. from N and E lines of NE NW of Sur. 1,100 ..... Location.

O. W. Killam's No. 1 Smith, 664 ft. from NW line, 680 ft. from NE line of Blk. 6, Sur. 1,110 ..... T.D. 2,317 ft.; drlg.

O. W. Killam's No. 1 Hogterp, 664 ft. from NW line, 680 ft. from NE line of Blk. 6, Sur. 1,110 ..... T.D. 2,370 ft.; abnd.

O. W. Killam's No. 2 Hogterp, 590 ft. from NE line, 265 ft. from SE line of Blk. 6, Sur. 1,110 ..... T.D. 1,505 ft.; set csg.

Newton Drilling Co.'s No. 1 A. Garcia, 2,550 ft. from S line, 2,340 ft. from W line of Sur. No. 52, 2 miles SW of Carolina Texas Field ..... T.D. 1,120 ft.; drlg.

Norden & Morris' No. 2 Gates, 340 ft. from W line, 400 ft. from S line of Blk. 5, Sur. No. 19 ..... T.D. 1,645 ft.; drlg.

Norden & Morris' No. 3 Gates, 2,500 ft. from E line, 3,400 ft. from S line of Survey No. 116 ..... Rigging up.

Thompkins et al's No. 1 Ortiz, 200 ft. from E line, 2,000 ft. from N line of Sur. No. 1,808 ..... T.D. 930 ft.; standing.

WILLIAMSON COUNTY

Burns et al's No. 1 E. G. Edge, 360 ft. from SE line, 267 ft. from SW line of 94-acre tract on Simon Miller Sur. ..... T.D. 850 ft.; drlg.

McLean et al's No. 2 R. C. Miller, 600 ft. to S line, 100 ft. to W line of tract in B. Manlove Sur. ..... T.D. 740 ft.; S.D.

McNeill & Matthews' No. 1 Bachmayer, 200 ft. from E line, 150 ft. from S line of C. C. Browning Sur. ... T.D. 2,000 ft.; standing.

WILSON COUNTY

A. M. Blume's No. 1-A Nicholson, 105 ft. N, 27 deg. E of No. 1 Johnson ..... Moving in rig.

ZAPATA COUNTY

Ballard & Mercer's No. 1 Flores, 500 ft. from NE line, 580 ft. from SE line of Blk. 27, Porcion 37 ..... T.D. 2,505 ft.; standing.
Joe Cullinan's No. 1 E. Gutierrez, 1,992 ft. from NE line, 2,303 ft. from SE line of Charco de la India grant ..... T.D. 1,575 ft.; drlg.
Donohoo et al's No. 1-A Garcia, 150 ft. from NE and SE lines of Blk. 7 of Subd. of 700-ac. of Share A, Charco Redondo grant ..... T.D. 575 ft.; drlg.
Huff & Fudge's No. 1 Uribe, 150 ft. from NW and SW lines of Blk. 8, Share 7, Partition 6, San Ignacio Subd. of Borrego grant ..... Rigging up.
Hunt & Polk's No. 1 H. Ramirez, 7,075 ft. N of S cor. and 2,918 ft. from W line of Share A of Villa grant .. T.D. 820 ft.; standing.
F. J. Ossenbeck's No. 1 Adelfonso Ramerix, 600 ft. W of Zapata-Roma highway, 150 ft. from SE line of Porcion 18 ..... Location.
H. L. Sargent et al's No. 1 Antonio Gutierrez heirs, 923 ft. from W line, 472 ft. from S line of Tract 2, Blk. 5, Nixon Subd., Porcion 10, San Ignacio Borrego grant ..... T.D. 920 ft.; drlg.
F. J. Searight's No. 1 F. Munoz, 660 ft. from N line and on line between Blks. 81 and 82 of Searight Subd. of Porcion 18 ..... Rigging up.
Stevens & Pope's No. 1 Martinez, 150 ft. from S and E lines of Blk. 95, C. H. Sprague Subd. of Sur. 434 .... Location.

Southwest Texas Proven Areas

Week Ending August 12

NORMANNA POOL—BEE COUNTY

Gulf Coast Oil Co.'s No. 5 Hicks, 600 ft. E of Nichols Oil Co.'s No. 2 Hicks ..... Moving in.

COSDEN POOL—BEE COUNTY

Coquat and Barnsdall Oil Co.'s No. 2 Roberts, 1,000 ft. from W line and 300 ft. from E line of tract in George A. Kerr Sur. ..... T.D. 3,706 ft.; set csg.

PETTUS POOL—BEE COUNTY

Gulf Coast Oil Co.'s No. 3 R. A. McKinney, 1,600 ft. from S line and 240 ft. from E line of tract in George Habbermacher Sur. ..... T.D. 3,670 ft.; set csg.
Slick-Seeligson, Inc.'s No. 7 Ray, 400 ft. N of No. 6 Ray .. T.D. 3,961 ft.; abnd.
The Texas Co.'s No. 6 Gremmell, 400 ft. N of No. 5 Gremmell ..... T.D. 3,950 ft.; abnd.

TULETA POOL—BEE COUNTY

Coquat & Hawn's No. 1 Harris, 1,000 ft. SE of Nichols' No. 1 Harris ..... T.D. 110 ft.; drlg.
John O'Neil & C.R.M. Drlg. Co.'s No. 1 Harris, 330 ft. from S and E lines of SW SE Sec. 3, Ragsley Subd. of Jose Uranga Sur. ..... Spudded in.
Nichols and C.R.M. Drlg. Co.'s No. 2 Harris, 330 ft. from S and E lines of Blk. 7, Sec. 3 of Ragsley Subd. of Uranga Sur. ..... Rigged up.
The Texas Co.'s No. 1 Cox, west offset to Nichols' No. 1 Harris ..... T.D. 400 ft.; drlg.

ECKERT POOL—BEXAR COUNTY

Alamo Nat. Gas Co.'s No. 3 J. H. Gembler, 180 ft. from N and E lines of tract in A. Manachaca Sur. 51. T.D. 1,216 ft.; drlg.
Alamo Nat. Gas Co.'s No. 1 Coreth, in Menchaca Sur. ... T.D. 1,061 ft.; comp. 4,000,000 ft. gas.
E. M. Carl's No. 1 F. Gembler, 160 ft. from N line, 750 ft. from E line of tract in J. Montez Sur. ..... T.D. 825 ft.; setting csg.
F. H. Eckert & Son's No. 1 Louis Brehm, W offset to No. 3 John J. Brehm ..... Location.

GAS RIDGE—BEXAR COUNTY

American Gas Co.'s No. 5 W. H. Kennon, 1,750 ft. from S line, 2,000 ft. from E line of 400-acre tract in Maria F. Rodriguez Sur. ..... T.D. 2,223 ft.; fishing.

ALTA MESA POOL—BROOKS COUNTY

Ed East's No. 3 Randolph Garcia, 1,000 ft. from S line, 200 ft. from W line of 2,161-ac. tract in La Escantada grant ..... Location.

DUNLAP POOL—CALDWELL COUNTY

Bob Rose's No. 1-B Walker, 320 ft. from NW line, 150 ft. from NE line of Walker lease, Solomon Seal Sur.. T.D. 2,460 ft.; on pump 150 bbls.
Cole et al's No. 1 Pierce, 400 ft. from NE line, 445 ft. from NW line of Pierce 100 ac. tract in Solomon Seal Sur. ..... Derrick on ground.
Owen & Gunby's No. 1 Dunlap, 700 ft. SW of Smilock's No. 1 Dunlap and 150 ft. from SE line of tract, S. Seal Sur. ..... T.D. 2,257 ft.; drlg.
Smilock Oil Co.'s No. 1 Dunlap, offsetting Bob Rose's No. 1 Pierce, in Solomon Seal Sur. ..... T.D. 2,400 ft.; abnd.

SALT FLATS—CALDWELL COUNTY

Hickman et al's No. 1 C. A. Dickerson, 150 ft. N of cen. of S line of tract in John D. Rains Sur. ..... Spudded in and S.D.

WEBSTER POOL—CALDWELL COUNTY

C. J. Webster Oil & Gas Co.'s No. 1 C. F. Robertson, 700 ft. from E line, 200 ft. from N line of 100-ac. tract, John A. Neill Sur. ..... Derrick.

COLE POOL—DUVAL COUNTY

Cole Petroleum Co.'s No. 76 Benavides, 1,010 ft. from NE lines, 150 ft. from NW lines of Blk. 8, Sec. 19, Cole Subd. of Mariano Arispe grant ..... T.D. 1,753 ft.; bailing.

NORTH GOVERNMENT WELLS—DUVAL COUNTY

F. J. Bissonet and Wm. McGinley's No. 1 Lundell, 150 ft. from E line, 660 ft. from S line of Sur. No. 43 ..... T.D. 245 ft.; drlg.
Buchanan & Terrell's No. 1 J. T. Smith, 330 ft. from N and W lines of NW NE Sur. 46 ..... T.D. 870 ft.; drlg.
R. F. Byrd's No. 2 Wright, 330 ft. from S and W lines of Sur. No. 101 ..... Location.
R. F. Byrd's No. 1 R. T. Wright, 150 ft. from N and W lines of Sur. 101 ..... T.D. 2,311 ft.; whipstocking.
H. H. Coffield's No. 2 Wendt, 150 ft. from N and E lines of SE NE Sur. No. 43 ..... T.D. 1,500 ft.; drlg.
Magnolia Petroleum Co.'s No. 5 Wendt, 330 ft. from N and E lines of SE NW, Sur. 44 ..... Rigging up.
Magnolia Pet. Co.'s No. 3 Wendt, 150 ft. from N and W lines of SE NW of Sur. No. 44 ..... T.D. 2,292 ft.; comp. 500 bbls.
Magnolia Pet. Co.'s No. 4 Wendt, 150 ft. from N and E lines of SW NW Sur. No. 44 ..... Location.
Magnolia Pet. Co.'s No. 1 Bryant White, 450 ft. from S line, 150 ft. from E line of SW NW Sur. 44 ..... Location.
George Parr's No. 1 Benavides School, 150 ft. from S and W lines of Sur. No. 44 ..... Rigged up.
Petroleum Finance Corp.'s No. 1 C. W. Hahl, 150 ft. from N and W lines of SW Sur. No. 46 ..... T.D. 2,296 ft.; running tubing.
San Diego Oil Corp.'s No. 1 L. Bennett, 150 ft. from S and W lines of SE SW Sur. No. 44 ..... T.D. 2,307 ft.; comp. 50 bbls.
San Diego Oil Corp.'s No. 2 Riley, 150 ft. from N and E lines of NW NW Sur. No. 44 ..... Location.
San Diego Oil Corp.'s No. 1 Hiller, 330 ft. from S and W lines of SW SE of Sur. 44 ..... Location.
Seacord & Putnam's No. 1 Johnson, 150 ft. from S and W lines of NW NW, Sur. 44 ..... T.D. 1,574 ft.; rigging up to deepen.
Southwest Drilling Co.'s No. 2 Wendt, 150 ft. from N and E lines of SE of Sur. 43 ..... Set. surface csg.
The Texas Co.'s No. 2 Riggs, 150 ft. from N and E lines of E half of NW of Sur. No. 46 ..... Location.
The Texas Co.'s No. 1 C. W. Freer, 150 ft. from S and E lines of SE NE, Sur. No. 45 ..... Location.
The Texas Co.'s No. 1 D. F. Freer, 660 ft. W of No. 1 D. F. Freer, Sur. No. 45 ..... Location.
Whisenant, Trenchard & French Oil Corp.'s No. 1 C. W. Hahl, 230 ft. from S line, 820 ft. from E line of SW SW of Sur. 44 ..... T.D. 2,390 ft.; set csg.

SOUTH GOVERNMENT WELLS POOL—DUVAL COUNTY

Humble Oil & Ref. Co.'s No. 6 White, 1,650 ft. from W line, 2,970 ft. from S line of Sur. No. 58 ..... T.D. 141 ft.; set surface csg.

SARNOSA FIELD—DUVAL COUNTY

Edwin M. Jones' No. 1 J. F. Williams, 2,156 ft. from NE line, 150 ft. from NW line of Sur. No. 131 ..... Rigging up.
Smith & Capps' No. 2-A Duval County Ranch Co., 200 ft. from SE and SW lines of W half of Sur. No. 574.. Rigging up.
The Texas Co.'s No. 1 R. L. Brown, 625 ft. from SE and SW lines of N quarter of Sur. No. 574 ..... T.D. 1,150 ft.; drlg.
The Texas Co.'s No. 2 Ruiz, 150 ft. from NE and SE lines of Sur. No. 127 ..... T.D. 2,812 ft.; abnd.
John F. Camp's No. 2 Weil, 1,200 ft. N, 18 deg. W of No. 1 Weil in Sur. No. 570 ..... Set surface csg.
E. R. Thomas' No. 1 Duval County Ranch Co., 150 ft. from SE and NE lines of E and S of Sur. 576 ..... T.D. 2,450 ft.; awaiting orders.

SLICK POOL—GOLIAD COUNTY

Slick-Seeligson, Inc.'s No. 3 Allen, 1,650 ft. from NE and SE lines of tract in Obid Marshall Sur. ..... Set surface csg.
Smith & Capps' No. 4 Duval County Ranch Co., Sur. 576.. T.D. 1,385 ft.; drlg.
Sun Oil Co.'s No. 2 Cuellar (Cano), 150 ft. from SW and SE lines of E¼ of Sur. No. 576 ..... Derrick.
The Texas Co.'s No. 2-A Duval County Ranch Co., 150 ft. from SW line, 573 ft. from SE line of W¼ of Sur. No. 574 ..... T.D. 2,438 ft.; testing.

DARST CREEK—GUADALUPE COUNTY

Humble Oil & Ref. Co.'s No. 5 Dan Denman ..... T.D. 2,547 ft.; comp. 75 bbls.

SAL-MAR FIELD—GUADALUPE COUNTY

R. R. Ogden's No. 1 Zunker, 500 ft. from S line, 165 ft. from E line of tract in L. Bollinger Sur. ..... T.D. 2,090 ft.; standing.
Sal-Mar Oil & Gas Co.'s No. 1 Hempel, 1,600 ft. from S line, 150 ft. from E line of tract in G. W. Williams Sur. ..... Rigging up.
George E. Smith's No. 1 Behring, 1,250 ft. from E line, 150 ft. from N line of G. W. Williams Sur. .... Set surface csg.
A. W. Wormser's No. 1 Pfuilman, 450 ft. W of Sal-Mar Oil Co.'s No. 1 Zunker in L. Bollinger Sur. ..... T.D. 2,365 ft.; plugging back.
A. W. Wormser's No. 1 Harris, 150 ft. from N line of tract and 150 ft. E of creek in Green Dewitt Sur..... Derrick.

SANDIA POOL—JIM WELLS COUNTY

Larcro Gas & Pet. Co.'s No. 3 Wade, 2,000 ft. S, 33 deg. W of No. 2 Wade, thence 1,970 ft. N, 57 deg. W ..... Moving in.

JACOB POOL—McMULLEN COUNTY

Jacob, Buzzini & Pickett's No. 5-A Jacob, 1,320 ft. S 15 deg. W of No. 4-A, in W. H. Jacob Sur. No. 10... Rigging up.
Longhorn Oil Co. and American Gas Co.'s No. 1 Lark, 2,790 ft. from N line, 1,150 ft. from W line of Lark tract, E.W.B. Scrugham Sur. ..... Moving in.

WENTZ POOL—McMULLEN COUNTY

V. G. Schimmel's No. 1 Two Rivers Ranch, SE cor. of Sec. 59, 5 miles S of Wentz ..... T.D. 1,654 ft.; standing.

ADAMS FIELD—MEDINA COUNTY

Yantis Oil Co.'s No. 1 Adams, 420 ft. from S line, 2,000 ft. from W line of F. Mumme Sur. ..... T.D. 179 ft.; setting surface csg.

SAXET FIELD—NUECES COUNTY

Houston Oil Co.'s No. 2-A Harrell, 1,112 ft. from N line, 170 ft. from W line of Sec. 28, Sheppard farm lots ..... T.D. 570 ft.; drlg.
Gulf Coast Oil Co.'s No. 2 Perkins & Gasse, 650 ft. from N line, 990 ft. from E line of Sec. 26 of Shepherd farm lots ..... T.D. 3,877 ft.; drlg.
Gulf Coast Oil Co.'s No. 1 Frank Bliss, 330 ft. from S and E lines of N half of 225-ac. tract ..... T.D. 4,095 ft.; drlg.
Kepley et al's No. 2 Roark, 150 ft. from S and W lines of Roark lease ..... Rigging up.
McCarthy-Rogers-Nix et al's No. 1 Isencee, 151 ft. from W line, 172 ft. from N line of Blk. 12 of Shepherd farm lots ..... T.D. 1,877 ft.; drlg.

LOS OLMOS POOL—STARR COUNTY

V. V. Combs' No. 1 Kelsey Bass, 150 ft. from N and W lines of NE NE, Sec. 6, Porciones 75, 76 and 77 ..... Location.
Frank Doyno's No. 1 Seabury, 450 ft. from S line, 815 ft. from E line of 80-ac. tract in Share 5, of W portion of Porcion 75 ..... Spudded in and S.D.
Felder, Mitchell & Barnsley's No. 1 Kelsey Bass, 450 ft. from N and W lines of SE SW, Sec. 8, Kelsey Bass Subd. of Porcions 75, 76 and 77 of Jurisdiction of Camargo ..... T.D. 327 ft.; previously abnd.; being deepened.
Hooks & Weaver's No. 10 Kelsey Bass in Sec. 8 ..... T.D. 485 ft.; set csg.; waiting on cmt.
Hooks & Weaver's No. 11 Kelsey Bass, 150 ft. from N line, 500 ft. from E line of NW NE, Sec. 8, Kelsey Bass Subd. ..... T.D. 475 ft.; testing.
W. E. Hopper's No. 3 Kelsey Bass, 150 ft. from E line, 365 ft. from S line of Sec. 6 ..... Location.
Los Olmos Oil & Gas Co.'s No. 24 Kelsey Bass, 250 ft. from S line, 460 ft. from E line of SE SW Sec. 6.... T.D. 460 ft.; comp. 60 bbls.
Los Olmos Oil & Gas Co.'s No. 25 Kelsey Bass, 450 ft. from S and W lines of SE Sec. 7 ..... T.D. 275 ft.; drlg.
J. P. Moore and C. B. Van Matre's No. 1 Seabury et al, 150 ft. from E line, 760 ft. from S line of Share 5, Subd. of W part of Porcion 75 ..... Spudded in.
Griffin et al's No. 1 Bass, 150 ft. from N and W lines of NW NW Sur. 11, Subd. Porciones 75, 76, 77 ..... T.D. 1,400 ft.; standing.
Munday Bros.' No. 1 Seabury, 840 ft. from E line, 4,550 ft. from S line of Share 5, Subd. of W two-thirds of Porcion 75, Jurisdiction of Camargo ..... Rigging up.
Rio Oil & Gas Co.'s No. 3 Kelsey Bass, 150 ft. from W line, 365 ft. from S line of W 10-ac. tract of NE SW Sec. 6 ..... Spudded in.
Sinclair & Rutherford's No. 1 Kelsey Bass, 150 ft. from S and W lines of SE NW Sec. 6, Subd. of Porciones 75, 76, 77 ..... T.D. 335 ft.; drlg.
Tarver & Nance's No. 5 Kelsey Bass, 450 ft. from S line, 750 ft. from W line of SW SE, Sec. 7 of Subd. of Porcions 75, 76 and 77, Jurisdiction of Camargo. . T.D. 320 ft.; drlg.

RIO GRANDE CITY POOL—STARR COUNTY

L. W. Connor's No. 1 Goodrich, 150 ft. from N and E lines of Tract 5, Lot 5, Porcion 81 ..... T.D. 1,480 ft.; abnd.
Heard & Swift's No. 3 Frank Doyno, 450 ft. from S and E lines of Blk. 8, Share 77-A of Porcions 80 and 81, Jurisdiction of Camargo ..... Spudded in.
Karona Oil Co.'s No. 2 Doyno, 750 ft. from E line, 469 ft. from S line of Blk. 8, Share 77-A, Porcion 81 .... Location.
Edgar Swift's No. 2 Frank Doyno, 750 ft. from E line, 470 ft. from S line of Blk. 8, Share 77-A, Porcion 81 . T.D. 1,809 ft.; drlg.
E. D. Traylor's No. 1 Doyno, 150 ft. from S and W lines of W half of Blk. 7, Share 77-A of Porciones 80 and 81 ..... T.D. 2,162 ft.; drlg.

ROSENBERG POOL—WEBB COUNTY

Montex Oil Co.'s No. 1 M. Vela, 479 ft. from N line, 490 ft. from W line of Blk. 4, Sur. No. 267 ..... Derrick.
South Texas Oil Co.'s No. 7 Laurel, 200 ft. from N line, 150 ft. from E line of Blk. 10, Sur. No. 271 ..... T.D. 1,575 ft.; drlg.

WEST COLE POOL—WEBB COUNTY

French Oil Corp.'s No. 1 Rosa Benavides, 450 ft. from S and W lines of Sur. No. 659 ..... T.D. 2,329 ft.; bailing.

CHAPMAN POOL—WILLIAMSON COUNTY

Westbrook Oil Co.'s No. 9-B Lawrence, 340 ft. NE of No. 8-B and 150 ft. from SE line of 27-ac. tract in S. Miller Sur. ..... Location.

ESCOBAS POOL—ZAPATA COUNTY

Allied Oil & Gas Co.'s No. 36 Gutierrez, 2,618 ft. from NE line, 520 ft. from SE line of Share 4, Comitas grant ..... Coring 1,450 ft.
Blankenship & Hill's No. 1 Montemayor, 150 ft. from W line, 450 ft. from S line of Blk. 6, Sur. No. 64 ..... T.D. 910 ft.; drlg.

F. M. Blair & Son's No. 1 Montemayor, 450 ft. from N line, 150 ft. from E line of Blk. 1, Sur. 63 ..... T.D. 1,723 ft.; drlg.
McGinley Oil Corp.'s No. 1 G. T. Montemayor, 150 ft. from N and W lines of Blk. 6, Sur. 64 ..... Location.
Shankle and Newton Oil Co.'s No. 18 Trevino, 333 ft. from SE line, 200 ft. from SW line of Blk. 14, Sur. 65 ..... T.D. 1,268 ft.; testing.
S. R. C. Oil Co.'s No. 6-E Trevino, 1,068 ft. from SW line, 574 ft. from NW line of Blk. 1, Sur. 64 ..... Rigging up.
The Texas Company's No. 11 Measles, 1,316 ft. from SE line, 17,700 ft. from SW line of Cerrito Blanco grant ..... Spudded in.

CHARCO REDONDO POOL—ZAPATA COUNTY

Hynes & Nessly's No. 1 Pablo Trevino, 4,820 ft. from NE line, 150 ft. from SE line of 1,066-ac. tract in Charco Redondo grant ..... Building derrick.
L. G. Smith's No. 1 J. M. Martinez, 350 ft. from NE and SE lines of Blk. 18, Share B, Dunke's Subd. of Charco Redondo grant ..... Location.
Windsor Oil Co.'s No. 1 Martinez, in NE of Blk. 15, of W. R. Duke Subd., Charco Redondo grant ..... T.D. 890 ft.; drlg.

Wildcat Operations in Louisiana-Arkansas

(Continued from Page 60)

R. A. Keaton's No. 1 Stephens, Sec. 25-10-6, 320 ft. N and W, SE cor. NW NW ..... S.D. 1,700 ft.
Natchitoches Pet. Co.'s No. 1 Edenburn, 2,240 ft. W, 1,320 ft. S, NE cor., Sec. 4-11-6w ..... Rigging up to deepen from 1,900 ft.
H. W. Perritt's No. 1 Cook, 165 ft. E, 165 ft. N, SW cor. NE SW, Sec. 5-8-9 ..... S.D. 2,992 ft.
Sabine Bayou Dev. Co.'s No. 1,130 Caw, 330 ft. N and E, SW cor. SE, Sec. 9-12-5 ..... Drlg. 1,020 ft.
Texana Oil Co.'s No. 1 Clark-Morris Lbr. Co., 878 ft. N, 660 ft. E. C, Sec. 23-5-6 ..... S.D. 2,504 ft.

OUACHITA PARISH

Monroe Oil & Royalties Co.'s No. 1 Thieler, 150 ft. N and E, SW cor. SE NW, Sec. 34-18-2e ..... S.D. 112 ft.
Wilson & Mitchell's No. 1 Williams, Sec. 5-16-1e, 330 ft. E, 340 ft. S, NW cor. SW SE ..... S.D. 3,480 ft.

RED RIVER PARISH

C. F. Davis' No. 1 Pierson, 500 ft. S, 217 ft. E, NW cor. SW NW, Sec. 12-14-11 ..... Location.
Lawrence Decker, tr.'s No. 1 Madden, 1,650 ft. S and W, NE cor., Sec. 21-14-10 ..... S.D. 1,759 ft.
La. Oil Dev. Co.'s No. 2 La. Delta Pecan Co., 2,950 ft. S, 300 ft. E, NW cor., Sec. 27-13-11 ..... Spudded and S.D. 60 ft.

RICHLAND PARISH

National Gas Co.'s No. 1 Singletary, 1,980 ft. N, 660 ft. W, SE cor., Sec. 20-18n-7e ..... S.D. 2,515 ft.

SABINE PARISH

Adams & Roberson's No. 1 Peterson, 406 ft. N, 200 ft. W, SE cor. NE NE, Sec. 35-8-13 ..... S.D. 100 ft.
R. W. Boulding's No. 1 Williams, Sec. 17-7-10, 200 ft. S and E, NW cor. SW NE ..... S.D. 2,628 ft.
J. M. Bridges' No. 1 Moore, 660 ft. E, 330 ft. N, SW cor. NE NW, Sec. 5-9-12 ..... Location.
Bridwell Oil & Gas Co.'s No. 1 Bray, 200 ft. N and W, SE cor., SE NW Sec. 32-8-11 ..... Location abd.
Bridwell Oil & Gas Co.'s No. 2 Bray, 200 ft. S, 90 ft. W, NE cor. NE ¼W Sec. 32-8-11 ..... Dry and abd. 2,659 ft.
Bridwell O. & G. Co.'s No. 1 La. Long Leaf, 330 ft. N and W, SE cor. NE NW, Sec. 31-8-10 ..... Rigging up.
R. E. Brooke's No. 1 A. Gray, 330 ft. N and W, SE cor. SW NE, Sec. 35-8-13 ..... Location.
J. H. Askew's No. 1 Henderson, 275 ft. N, 165 ft. E, SW cor. SW SE, Sec. 31-8-10 ..... Set 6-in. 2,408 ft.
V. V. Bull's No. 1 Henderson, 445 ft. S, 275 ft. E, NW cor. SE SE, Sec. 31-8-10 ..... Derrick.
Cliff Oil Co.'s No. 1-A Martinez School, 720 ft. N, 105 ft. W, SE cor. NE SE, Sec. 4-7-13 ..... W.O.S.R. 2,450 ft.
Clopton et al's No. 1 Campbell, 335 ft. S, 353 ft. W, NE cor. NW NE Section 5-7-11 ..... Set 6-in. 2,200 ft.
Clopton et al's No. 1 Garcia, 330 ft. N and W, SE cor. SE NW Sec. 4-7-13 ..... Derrick.
W. M. Coates' No. 1 Gray, 330 ft. N and W, SE cor. SW, Sec. 3-7-13 ..... Location.
W. M. Coates' No. 2 Gray, 330 ft. S and W, NE cor. SE SW, Sec. 3-7-13 ..... Location.
Coates Pet. Co.'s No. 2 Stille, 330 ft. N and E, SW cor. SE SW, Sec. 35-8-11 ..... W.O.S.R. 2,465 ft.
Coates Pet. Co.'s No. 3 Stille, 330 ft. N and E, SW cor., Sec. 35-8-13 ..... Location.
The Coming Oil Co.'s No. 1 Cobb, 330 ft. N and E, SW cor., Sec. 14-7-11 ..... S.D. 2,525 ft.
Crescent Drlg. Co.'s No. 1 Williams, 370 ft. E, 330 ft. S, NW cor. N½ SW, Sec. 21-7-12 ..... Location.
Crescent Drlg. Co.'s No. 2 Williams, 330 ft. S and W, NE cor. SE NW, Sec. 21-7-12 ..... Location.
Mark Curtis et al's No. 1 Sabine Lbr. Co., 330 ft. N and W, SE cor. NE SE, Sec. 35-8-13 ..... S.D. 2,030 ft.
B. Q. Daniels' No. 1 Armstrong, SE cor. SE NE, Sec. 31-8-10 ..... Derrick.
Mrs. Dabney's No. 1 Hill, 265 ft. N, 235 ft. W, SE cor. NE NE, Sec. 5-7-11 ..... Location.
Mrs. Dabney's No. 2 Hill, 230 ft. S, 235 ft. W, NE cor., Sec. 5-7-11 ..... Location.
R. E. Davidson's No. 1 Davis, 660 ft. S, 125 ft. E, NW cor., Sec. 23-7-11 ..... Rigging up.
William DeSota's No. 1 Mooney, 350 ft. S, 395 ft. E, NW cor., Sec. 35-8-13 ..... Rigging up.
B. A. Ferrell's No. 1 Haley, Sec. 4-7-12, 300 ft. S and E, NW cor. NW SW ..... S.D. 2,150 ft.
Harry Flinchbaugh's No. 1 Sepulbedo, 350 ft. N and E, SW cor. SE NE, Sec. 4-7-13 ..... W.O.S.R. 2,424 ft.
R. L. Gay, tr.'s No. 1-A Long Bell Lbr. Co., 430 ft. S, 200 ft. W, NE cor., NW NW, Sec. 10-8-13 ..... S.D. 6,150 ft.
W. N. Hankins' No. 1 Tilley, 200 ft. E, 30 ft. S, NW cor. SE SE, Sec. 30-8-12 ..... Drlg. 1,505 ft.
Howard et al's No. 1 Williams, 300 ft. N and E, SW cor. SE NW, Sec. 13-7-11 ..... W.O.S.R. 2,580 ft.
Ab Jones' No. 1 Garcia, 200 ft. S and W, NE cor. NW SE, Sec. 4-7-13 ..... Drlg. 710 ft.
G. R. Jordan's No. 1 Dew, 330 ft. N, 340 ft. E, SW cor. SW SE, Sec. 24-8-11 ..... S.D. for wtr. 950 ft.
A. D. King, tr.'s No. 1 Davis, 170 ft. N, 410 ft. E, SW cor. NW NE, Sec. 29-7-11 ..... Location.
A. D. King, tr.'s No. 1 T. L. Andries, 200 ft. S, 300 ft. E, NW cor. SE SE, Sec. 15-7-11 ..... Derrick.
S. A. Lane et al's No. 1 DeKeyser, 333 ft. E, 330 ft. S, NW cor. NE, Sec. 23-7-11 ..... S.D.; W.O. 2,930 ft.
Geo. LeGrand's No. 1 McGough, Sec. 3-8-10 ..... S.D. 1,450 ft.
Magnolia Pet. Co.'s No. 1 Williams, 155 ft. S, 408 ft. W, NE cor. NW, Sec. 6-7-10 ..... Set 6-in. 2,414 ft.
H. C. Maulding's No. 1 Moores, 330 ft. S and W, NE cor. SE NE Sec. 14-7-13 ..... Rigging up.
Paul L. Miller's No. 1 Lucius, 175 ft. N and W, SE cor. NE SW, Sec. 31-8-10 ..... Drlg. 2,660 ft.
Ray Murray's No. 1 Lefkobita, 210 ft. S, 330 ft. W, NE cor., Sec. 5-7-13 ..... Drlg. 1,030 ft.
Hill Myers' No. 1 Garcia, 200 ft. N and W, SE cor. SW NW, Sec. 4-7-13 ..... Drlg. 2,420 ft.
E. F. Neely's No. 1 Raina, 660 ft. N, 100 ft. W, SE cor., SW NW, Sec. 14-7-11 ..... W.O.S.R. 2,541 ft.
Neely et al's No. 1 C. Henry, Sec. 23-7-11 ..... S.D. 2,906 ft.
C. D. Neff, tr.'s No. 1 Snell, Sec. 9-7-11, 350 ft. N, 660 ft. W, SE cor. Sec. ..... W.O.S.R. 2,500 ft.
Palmer & Smitherman's No. 1 La. Long Leaf Lbr. Co., Sec. 12-7-11, 330 ft. S and E, NW cor. NE SE ..... Location.
Palmer & Smitherman's No. 2 La. Long Leaf Lbr. Co., 330 ft. S and W, NE cor. SE, Sec. 12-7-11 ..... Location.
Pelican Natural Gas Co.'s No. 2 Buckley, 330 ft. S and W, NE cor. NW NW, Sec. 6-7-10 ..... Set 6-in. 2,407 ft.
H. W. Perritt's No. 3 Brown Lbr. Co., 510 ft. S, 455 ft. W, NE cor. NW NE, Sec. 31-8-10 ..... Rigging up.
Roy Raines et al's No. 1 Beard, 720 ft. E, 700 ft. N, SW cor. SW SE, Sec. 8-8-10 ..... Derrick.
Thornton et al's No. 1 S. S. Martinez, 355 ft. S, 330 ft. W, NE cor. SE NE, Sec. 4-7-13 ..... Set 6-in. 2,048 ft.
Otis A. Roberts' No. 1 S. S. Martinez, 312 ft. E, 35 ft. S, NW cor. SE NE, Sec. 4-7-13 ..... S.D. 2,480 ft.
Otis A. Roberts' No. 1 Sabine Lbr. Co., 224 ft. S, 481 ft. W, NE cor. SW NE, Sec. 5-7-13 ..... Drlg. 1,975 ft.
Robeste & Sledge's No. 1 Lefkobita, 346 ft. S, 672 ft. E, NW cor. SE NE, Sec. 5-7-13 ..... Derrick pattern.
Robeste & Sledge's No. 2 Sabine Lbr. Co., 803 ft. W, 796 ft. N, SE cor. SE SW, Sec. 5-7-13 ..... Set 10-in. 43 ft; drlg. 1,335 ft.
Robeste & Sledge's No. 3 Sabine Lbr. Co., 413 ft. N, 479 ft. W, SE cor. SE SW, Sec. 33-8-13 ..... Derrick.
Bill Rowe's No. 1 Sepulbedo, 530 ft. N, 200 ft. E, SW cor. SE SE, Sec. 4-7-13 ..... Set 6-in. 2,005 ft.
Skully & Beach's No. 3 Lafitte, 1,400 ft. S, 132 ft. W, NE cor. NW NW, Sec. 13-7-11 ..... Location.
Skully & Beach's No. 2 Lafitte, 449 ft. S, 228 ft. E, NW cor., Sec. 13-7-11 ..... Set 6-in. 2,449 ft.
H. R. Smith et al's No. 1 La. Long Leaf Lbr. Co., Sec. 12-7-11, 330 ft. S and W, NE cor. NW SW ..... Location.
W. W. Smith et al's No. 1 Sepulbedo, 230 ft. N, 350 ft. W, SE cor., Sec. 4-7-13 ..... Drlg. 2,285 ft.
Sneed & Sneed's No. 1 Pearce, 200 ft. N, 215 ft. E, SW cor. NE SW, Sec. 35-8-13 ..... S.D.; W.O. 2,405 ft.
Southland Drlg. Co.'s No. 1 Frost Lbr. Co., 330 ft. N and W, SE cor. NE NE, Sec. 13-9-11 ..... S.D. 1,905 ft.
H. B. Stacey et al's No. 1 Hefkobita, 457 ft. N, 533 ft. E, SW cor. SE, Sec. 24-8-13 ..... Derrick.
State Prod. Co., Inc.'s No. 1-B Davis, 200 ft. N and E, SW cor., Sec. 17-7-10 ..... Derrick.
Supreme Oil Co.'s No. 1 Pruitt, 330 ft. N and E, SW cor. SE SW, Sec. 30-8-11 ..... S.D. 1,706 ft.
B. E. Taylor's No. 1 Gay, 232 ft. S, 476 ft. E, NW cor. SE SW, Sec. 36-8-13 ..... Location.
B. E. Taylor's No. 1 Wooley, 330 ft. N and E, SW cor. SE SW, Sec. 36-8-13 ..... Location.
A. F. Tarver's No. 3 Cutrer, Sec. 12-7-11, 1,120 ft. E, 300 ft. N, SW cor. NW ..... W.O.S.R. 2,600 ft.
Thornton et al's No. 2 S. S. Martinez, 312 ft. E, 205 ft. S, NW cor. SE NE, Sec. 4-7-13 ..... Location.
A. A. Trammell's No. 1 Sepulbedo, 330 ft. N and W, SE cor. NW NE, Sec. 5-7-13 ..... Derrick.
Triangle Drlg. Co.'s No. 1 La.-Long Leaf Lbr. Co., 330 ft. N and W, SE cor. Sec. 11-6-11 ..... Drlg. 2,500 ft.
W. C. Turnbow's No. 1 Williams, 200 ft. W C E line SW NW, Sec. 13-7-11 ..... Set 10-in. 61 ft; drlg. 283 ft.
C. C. Walker's No. 1 Noble-Neely, 330 ft. S and E, NW cor. SW, Sec. 36-8-13 ..... S.D. 1,700 ft.
Wurtsbaugh & Torren's No. 1 Peterson, 320 ft. N and W, SE cor, SW NE, Sec. 36-8-13 ..... Location.
Wurtsbaugh & Torran's No. 1 Gray, 330 ft. N and SE cor. SE NW, Sec. 35-8-13 ..... S.D. 2,446 ft.
Tuffree et al's No. 1 T. L. Andries, N½ NE SE, Sec. 15-7-11 ..... S.D. 100 ft.

TENSAS PARISH

H. V. Schumacker's No. 1 Curroy, 1,320 ft. S, 1,320 ft. E, NW cor., Sec. 29-11-12 ..... Reaming 3,590 ft.

VERNON PARISH

Liano Co-operative Colony's No. 1 fee, NW NE, Sec. 34-2n-9w ..... Drlg. 1,350 ft.

WEBSTER PARISH

George Pearce et al's No. 1 Ambrose, 200 ft. N and W, SE cor. SW SE, Sec. 22-20-10 ..... Set 10-in. 250 ft.

WINN PARISH

P.V.T. Oil Co.'s No. 1 Southern Paper Co., 150 ft. S and W, NE cor. SW, Sec. 28-13-3 ..... Drlg. 250 ft.

Arkansas

CLAY COUNTY

S. C. Jeffus' No. 1 Underwood, 510 ft. N, 350 ft. W, C, NW SE, Sec. 4-20-3 ..... 1,253 ft.

CLEBURNE COUNTY

Frank S. Craver et al's No. 2 Doniphan Lbr. Co., 700 ft. N, 200 ft. E, SW cor. SW, Sec. 34-11-9 ..... Location.

CLEVELAND COUNTY

Crum & Stillwell's No. 1 E. R. Bell, Sec. 10-10s-12 ..... Rigged up and S.D.

DALLAS COUNTY

J. H. James, tr.'s No. 1 Fordyce Lbr. Co., 200 ft. S, 200 ft. E, NW cor. SE, Sec. 11-9-15 ..... S.D. 2,575 ft.

DREW COUNTY

Co-Operative Dev. Co.'s No. 1 Ogles, Sec. 35-15-5, 330 ft. S and E, NW cor. NE NW ..... Drlg. block shale 2,978 ft.

FRANKLIN COUNTY

Ozark Natural Gas Co.'s No. 1 Monroe, C NW NE, Sec. 13-8-29 ..... Drlg. 126 ft.

HOT SPRINGS COUNTY

Star Oil Co.'s No. 1 Cunningham, 285 ft. S, 285 ft. W, NE cor., Sec. 11-5-16 ..... S.D. 1,340 ft.

LINCOLN COUNTY

Lawrence Cook, tr.'s No. 1 McGhee Planting Co., 420 ft. S, 200 ft. W, NE cor. NE SW, Sec. 5-8-7 ..... S.D. 2,985 ft.

LITTLE RIVER COUNTY

Harrell et al's No. 1 Taffee, 32 ft. W, 630 ft. E, 330 ft. S, SW cor. W NW, Sec. 25-12s-32w ..... S.D. 125 ft.

MILLER COUNTY

C. E. Litchfield's No. 1 Hervey, 525 ft. S, 350 ft. W, NE cor. NE NW, Sec. 2-15-26 ..... T.A. 2,385 ft.
Fitzwater et al's No. 1 E. A. McCowand, NW cor. NW SE, Sec. 22-15-28 ..... Derrick pattern.
Fitzwater et al's No. 1 C. J. Norsen, SW cor. SE SW, Sec. 20-15-27 ..... Moving in rig.
Fitzwater et al's No. 1 Beck, Sec. 32-15-26 ..... S.D. 2,926 ft.
C. E. Litchfield et al's No. 1 Stone, SE cor. SW, Sec. 32-14-26 ..... Rigging up.
W. E. Noel et al's No. 1 Dickson hrs., 1,980 ft. W, 660 ft. S. NE cor., Sec. 11-20-27 ..... S.D; W.O. 2,600 ft.
Fred Pederson's No. 1 Fouke, 150 ft. S and W, NE cor., Sec. 11-17-27 ..... Location.

OUACHITA COUNTY

Copenhaven et al's No. 2 Berg, C SE SE, Sec. 13-15-17 ..... W.O.S.R. 2,208 ft.
McLean et al's No. 1 L. D. Neely, Sec. 23-15-16, 200 ft. N and W, SE cor. NE SW ..... S.D. 150 ft.
Chas. Steele et al's No. 1 Anderson, 155 ft. S, 150 ft. E, from center Section 36-12-18 ..... S.D. 525 ft.

PIKE COUNTY

B. R. Henderson's No. 1 J. L. Lee, 400 ft. S, 350 ft. E, NW cor. SW SE, Sec. 31-8-24 ..... S.D.; W.O. 1,020 ft.
B. R. Henderson's No. 1 W. B. East, 300 ft. S, 150 ft. W, NE cor., Sec. 13-9-23 ..... Rigging up on new hole.

PRAIRIE COUNTY

Powell Creek O. & G. Co.'s No. 1 Kloss, NE SW, Sec. 3-4n-4w ..... Partly rigged up and S.D.

SCOTT COUNTY

Waldron O. & G. Co.'s No. 1 White, NE cor. SW NW, Sec. 17-3n-29 ..... S.D. 1,840 ft.

SEVIER COUNTY

Tristate Oil Co.'s No. 1 Grimble, Sec. 34-8-22, S½ SW ..... S.D. 950 ft.

ST. FRANCIS COUNTY

E. R. Henderson's No. 1 Britton, Sec. 1-4-1e, 1,000 ft. S and E NW cor. NE NW ..... Drlg. 2,710 ft.

UNION COUNTY

Cox et al's No. 1 Goodwin, 360 ft. S. 130 ft. W, NE cor. SW SW, Sec. 3-16-16 ..... S.D. 140 ft.

H. H. Helms' No. 1 C. H. Murphy, NE cor. NW NE, Sec. 31-16-14 ..... S.D. 2,675 ft.

Wilson & Chapman's No. 1 King, Sec. 3-18-13, 330 ft. N and E, SW cor. NE NE ..... Derrick.

Wilson & Chapman's No. 1-A D. Norman, 330 ft. S and E, NW cor. N½ NE SE, Sec. 3-18-13 ..... S.D. 1,678 ft.

WASHINGTON COUNTY

(Cable tools)

A. B. Chase and Ed Rogers' No. 1 Cunningham, 125 ft. S, 300 ft. W, NE cor. SW NE, Sec. 14-15-32 ..... S.D. 1 750 ft.

East Texas

BOWIE COUNTY

Logan & Elliott's No. 1 Smith, 9,600 ft. S, 2,500 ft. W, NE cor. Chas. Lewis Sur. ..... S.D. 4,505 ft.

Lanford et al's No. 1 W. W. Whybark, 200 ft. S, 200 ft. W, SW cor. J. H. Dyer Sur. ..... S.D. 1,792 ft.

CASS COUNTY

Davis & Pigg's No. 1 Roy Bryan, SW cor. Roy Bryan 88-ac. tr., Albert H. Lattimer Sur. ..... S.D. 2,360 ft.

C. E. Murdock's No. 1 First National Bank, Evans Watson Sur. ..... S.D. 4,390 ft.

John C. Rogers' No. 1 I. E. Lanier, 573 ft. N, 879 ft. W, SE cor. Lanier 56 ac. in K. E. Welborn Sur. ... S.D. 2,280 ft.

John C. Rogers et al's No. 1 W. Q. Henderson, 3,100 ft. S, 2,100 ft. E, NW cor., Wm. Davis Sur. ..... S.D. 940 ft.

HARRISON COUNTY

M. E. Nash et al's No. 1 Henderson, G. L. Bledsoe Sur.. S.D. 85 ft.

Ryan Cons. Pet. Corp.'s No. 1 J. M. Fuhr, 1,300 ft. N of NW cor. T. J. Copelin Sur., 1,675 ft. SW at right angles to NW SE line of O'Neal Sur. ..... Rigged up and S.D.

Triangle Drlg. Co.'s No. 1 Platt, 1,125 ft. W, 1,995 ft. N, SE cor. F. C. Barker Sur. ..... Location.

MARION COUNTY

Baunoch Dev. Co.'s No. 1 Miller, 725 ft. N, 1,470 ft. E, SW cor. H. Fulgram Sur. (was Gist, Claunch & Dodson) ..... Drlg. 4,182 ft.

Geo. Hindeman et al's No. 1 F. V. Lindsey, 2,500 ft. S, most northerly N line, 3,555 ft. E most easterly W line, Alexander Albright Sur. ..... S.D. 2,380 ft.

Purcell et al's No. 1 Coker, M. Reed Sur. ..... S.D. 1,957 ft.

PANOLA COUNTY

Moses & Wallace's No. 1 Daniel, 600 ft. N and W lines, Mrs. Gerrell 100-ac. tr., SW cor. Isabel Hanks Sur... S.D. for D.S. 740 ft.

J. L. Nelson et al's No. 1 J. Williams, 300 ft. S, 700 ft. W, NE cor. Williams' 67-ac. tr. in James Hanks Sur. ..... S.D. 3,055 ft.

SHELBY COUNTY

E. H. Francis' No. 1 John Mima, Mary Smith Sur. .... Drlg. 1,420 ft.

General Minerals Co.'s No. 2 Pickering Lbr. Co., 600 ft. N, 400 ft. E, SW cor. D. S. Height Sur. ..... Spudded in; W.O.; surface csg.

Henry Mauiding's No. 1 Frost Lbr. Co., NE cor. Frost Lbr. Co.'s 20-ac. tr., A. D. Fountain Sur. ..... Rigged up and S.D.

Prairie Creek Crude Co.'s No. 1 Ellington, 150 ft. N and 200 ft. W from SE cor. 42-a. tr. of J. Burleson Sur... S.D. for water 1,270 ft.

Ridgeway et al's No. 1 Polley, Domingues Gonzales Sur., 2,180 ft. E of SW cor., 160 ft. N at right angles of Polley 457-ac. tr. ..... S.D. 2,375 ft.

Sedberry et al's No. 1 Pickering Lbr. Co., 600 ft. N, 400 ft. E, SW cor. Jane Stoddard Sur. ..... S.D.; W.O. 1,768 ft.

Western World's No. 1 Foster, Billingsby-Jeremiah Bowlin Sur. ..... S.D. 2,940 ft.

Wray & Dunbar's No. 1 C. A. Hayden, 600 ft. N and W SE cor. 152-ac. tr. in D. T. F. Yordt Sur. ..... Drlg. 2,282 ft.

Louisiana-Arkansas Proven Areas

North Louisiana

CADDO PARISH—PINE ISLAND

Company, well, farm name, section and block—	Remarks:
Louana Oil & Gas Co.'s No. 1 Cushman, 1,380 ft. N, 600 ft. E, SW cor., Sec. 33-19-16	Coring 2,727 ft.

CLAIBORNE PARISH

Triangle Drlg. Co.'s No. 1 Brown, 1,542 ft. N, 1,900 ft. W, SE cor. NE, Sec. 1-19-6 ..... Drlg. 4,004 ft.

MOREHOUSE PARISH

United Gas Public Service Co.'s No. 8 Sandidge, 987 ft. S, 33 ft. E, NW cor., Sec. 26-20-4e ..... Location.

OUACHITA PARISH

Carbon Con.'s No. 7 Guthrie, Sec. 50-20n-4e, 5,263 ft. N, 7,475 ft. W of cors. of Secs. 25, 26 and 49, in Sec. 50 ..... Location.

RICHLAND PARISH

Pelican Nat. Gas Co.'s No. 1 Noe, C W½ NE, Sec. 14-17-5e ..... Location.

SABINE PARISH—ZWOLLE

Abbott & Rankin's No. 1 Nulton, 330 ft. S and E, NW cor. SE NE, Sec. 2-7-13 ..... Derrick.

Abbott & Rankin's No. 1 Towley, 330 ft. S and E, NW cor. SE NW, Sec. 1-7-13 ..... Drlg. 3,110 ft.

Acme Oil & Gas Co.'s No. 3 La. Long Leaf, 535 ft. W, 80 ft. N, SE cor., Sec. 3-7-11 ..... Set 6-in. 2,360 ft.

J. O. Andree's No. 1 Sabine Lbr. Co., 330 ft. S and E, NW cor. SW NW, Sec. 11-7-12 ..... Location.

J. H. Askew's No. 1-E McNeely, 220 ft. S, 260 ft. W, NE cor. SE NE, Sec. 14-7-11 ..... Set 10-in. 42 ft; drlg. 200 ft.

Baird Bros.' No. 2 S. S. Martinez, NW cor. NW SW Sec. 2-7-13 ..... S.D. 2,062 ft.

Cameron Oil Co.'s No. 1 G. Martinez, 845 ft. E, 540 ft. N, SW cor., Sec. 2-7-13 ..... Derrick.

Coates Pet. Co.'s No. 2-B Nulton, 330 ft. N and E, SW cor. SW NE, Sec. 3-7-13 ..... Drlg. 3,235 ft.

Dangail O. & G. Co.'s No. 1-F Nulton, 330 ft. S and E, NW cor. SW NW, Sec. 2-7-13 ..... W.O.S.R. 2,501 ft.

Dangail O. & G. Co.'s No. 2-G Nulton, 330 ft. N and E, SW cor., NE NE, Sec. 3-7-13 ..... S.D; W.O. 2,475 ft.

J. E. Grandstaff's No. 1 Johnson, 8½ SW SW, Sec. 2-7-11 Set 6-in. 2,338 ft.

E. W. Gill's No. 1 Gray, 200 ft. S and W, NE cor. SW SW Sec. 3-7-13 ..... Drlg. 33 ft.

J. J. Hall's No. 4 Jacoba, 175 ft. W, 300 ft. N, SE cor. Sec. 1-7-11 ..... S.D. repairing rig 1,780 ft.

D. D. Holcomb's No. 2 Quayhaglew, 149 ft. N, 200 ft. E SW cor. SE SE, Sec. 11-7-11 ..... Rigging up.

Hutchini et al's No. 1 Garcia, 382 ft. N, 354 ft. W, SE cor. NE SW, Sec. 4-7-13 ..... Set 10-in. 45 ft; drlg. 1,220 ft.

Imperial Producers Co.'s No. 1 Leone Est., 1,334 ft. S, 660 ft. E, NW cor., Sec. 32-8-12 ..... Location.

H. M. Jones' No. 1 Raines, 300 ft. S, 150 ft. W, NE cor. NW NW, Sec. 14-7-11 ..... Derrick.

A. D. King, trustee's No. 1 Webb, 300 ft. S and E, NW cor. NW SW, Sec. 31-8-11 ..... Drlg. 2,040 ft.

Lanier et al's No. 2 Newton, 400 ft. N, 330 ft. W, SE cor. NW, Sec. 3-7-13 ..... Dry and abd. 2,460 ft.

Lion Oil Ref. Co.'s No. 2 LaRoux, 384 ft. S and W, NE cor. SW SE, Sec. 3-7-13 ..... Location.

Loring Oil Co.'s No. 18 Bowman-Hicks, 1,280 ft. S, 275 ft. E, NW cor. SW NW, Sec. 15-7-13 ..... Repairing rig 5,272 ft.

H. D. McDonald's No. 1 T. L. Andrin, 180 ft. E, 150 ft. N, SW cor. NW SE, Sec. 15-7-11 ..... Derrick.

Frank Melat's No. 1 Davis, 175 ft. W, 225 ft. S, NE cor., Sec. 2-7-11 ..... Drlg. 2,100 ft.

Ben Merritt, trustee's No. 1 Chadick, SW cor. SW NE, Sec. 31-8-10 ..... Rigging up.

C. D. Neff, tr.'s No. 1 Stoker, 212 ft. N and W, SE cor. NE SW, Sec. 10-7-11 ..... Derrick.

Pelican Nat. Gas Co.'s No. 15 Louisiana Long Leaf Lbr. Co., 330 ft. N and W, SE cor. SE SW, Sec. 5-7-11 .... Drlg. 2,490 ft.

T. L. Phillips et al's No. 1 Haley, 330 ft. S and E, NW cor. NW SE, Sec. 6-7-12 ..... Derrick.

F. G. Reid's No. 4-A McNeely, 200 ft. S and W, NE cor. NW NE, Sec. 14-7-11 ..... Pumping 12 bbls. 2,600 ft.

C. T. Ruffian's No. 2 Libby, 330 ft. S and E, NW cor. NE NW, Sec. 8-7-11 ..... W.O.S.R. 2,464 ft.

Sabine Prod. Co.'s No. 3 Pearce, Sec. 10-7-11, 330 ft. S and E, NW cor, SE NW ..... S.D.; W.O. 2,699 ft.

Sabine Prod. Co.'s No. 2 Sabine Lbr. Co., 330 ft. S and E from center of Sec. 3-7-13 ..... Testing 2,382 ft.

Self & Kissick's No. 2 Moran, C W½ SE NE, Sec. 1-7-11.. Dry and abd. 2,686 ft.

Service Drlg. Co.'s No. 3-A Gardner, 138 ft. S, 134 ft. W, NE cor., Sec. 12-7-11 ..... Reaming 2,455 ft.

Skidmore Oil Co.'s No. 1 G. Martinez, 396 ft. E, 330 ft. S, NW cor. SE SE, Sec. 2-7-13 ..... Derrick.

Ben F. Smith's No. 2 Turner, 250 ft. N, 450 ft. E, SW cor. NW NW, Sec. 4-7-11 ..... S.D. for wtr. 700 ft.

W. S. Smith, trustee's No. 1 Hamilton, 330 ft. N and E, SW cor. NE NE, Sec. 32-8-11 ..... Derrick.

F. E. Stancil's No. 1 Pouder, 273 ft. S, 397 ft. E, NW cor. NE SE, Sec. 10-7-11 ..... S.D. 2,593 ft.

F. E. Stancil's No. 2 Pouder, 805 ft. N, 283 ft. E, SW cor. SE SE, Sec. 10-7-11 ..... Location.

State Prod. Co.'s No. 1 Keazele, 150 ft. N and W, SE cor. NW SW, Sec. 3-7-13 ..... Drlg. 920 ft.

State Prod. Co.'s No. 1 Liles, 150 ft. S and W, NE cor. SE SW, Sec. 28-8-11 ..... Location.

State Prod. Co.'s No. 1 Sabine Lbr. Co., 385 ft. N, 100 ft. W SE cor. NW SW Sec. 3-7-13 ..... Set 6-in. 2,025 ft.

The Texas Company's No. 2 Maines, 330 ft. N and E, SW cor. SE, Sec. 5-7-11 ..... Derrick.

The Texas Company's No. 2 Nabours, 576 ft. W, 237 ft. S NE cor. SE, Sec. 2-7-11 ..... Drlg. 2,650 ft.

A. A. Trammell's No. 1 Hill, 330 ft. S and W, NE cor. SE SE, Sec. 32-8-11 ..... Drlg. 1,625 ft.

J. P. White's No. 1 Nulton, 330 ft. N and E, SW cor. NE NW, Sec. 1-7-13 ..... Drlg. 2,057 ft.

George Woulf's No. 1 Nulton, 330 ft. S, 330 ft. E, NW cor. SW NE, Sec. 3-7-13 ..... Set 6-in. 2,034 ft

UNION PARISH

Southern Carbon Co.'s No. 60 fee, 36 ft. W, 482 ft. S, NE cor. NW, Sec. 20-20-4e ..... Comp. 5,000,000 ft. gas 2,149 ft.

Southern Carbon Co.'s No. 61 fee, 2,210 ft. N, 660 ft. E, SW cor. SE, Sec. 17-20-4e ..... Rigging up.

Arkansas

UNION COUNTY—URBANA

Artex Oil Co.'s No. 1 Goodwin, 330 ft. N and W, SE cor., Sec. 31-16-15 ..... Set 10-in. 96 ft.

Marine Oil Co.'s No. 1 Winn est., 330 ft. S and E, NE cor. S½ NW, Sec. 11-18-13 ..... T.A. 3,586 ft.

Marine Oil Co.'s No. 2-E Thompson, 330 ft. N, 330 ft. E, SW cor. NE NE, Sec. 10-18-13 ..... Location.

Wilson & Chapman's No. 1-B Hadley, Sec. 3-18-13, 330 ft. S and W, NE cor. SE NW ..... T.A. 3,545 ft.

Wilson & Chapman's No. 2 Emily King, Sec. 3-18-13, 150 ft. S, 150 ft. E, NW cor. NE NE ..... S.D. 1,730 ft.

East Texas

PANOLA COUNTY

Daisy O. & G. Co.'s No. 1 Rucks, John Palmer Sur. ..... S.D. 3,359 ft.

United Prod. Corp.'s No. 17 Steele, 1,320 ft. N, 660 ft. W, SE cor. C. D. Steele lse., in B. C. Jordan Sur. .... Location.

Mississippi

HINDS COUNTY

Cleve Love et al's No. 1 Security Realty Co., 700 ft. E, 300 ft. S, NW cor. NE NW, Sec. 1-5n-1e ..... Comp. 45,000,000 ft. gas 2,400 ft.

McGuire et al's No. 1 Spring Lake, Sec. 11-5n-1e, 250 ft. N, 450 ft. W, from center of Sec. ..... T.A. 2,487 ft.

Ridgeway & McGehee's No. 2 Mosal, 300 ft. W, 200 ft. N, SE cor. NE SW, Sec. 24-6n-1e ..... Set 6⅝-in. 2,486 ft.

RANKIN COUNTY

Henslee et al's No. 1 Warner, 200 ft. S and E NW cor. NE SE, Sec. 14-5n-1e ..... Testing 2,465 ft.; digging pits for storage.

Meredith-Smith et al's No. 3 Strawder, 400 ft. S, 750 ft. W, NE cor., Sec. 12-5n-1e ..... Comp. 41,000,000 ft. gas 2,376 ft.

Wildcat Operations in Mississippi

CLARKE COUNTY

Company, well, farm name, section and block—	Remarks:
F. X. Gowans et al's No. 1 Elfring, SE NE, Sec. 13-1n-14e.	S.D. 104 ft.

HINDS COUNTY

Atkins et al's No. 1 Crane Lawrence, Sec. 23-6n-1e, 300 ft. E, 132 ft. N, SW cor. NE SE ..... Set 4½-in. 2,485 ft.

Miss.-Minn. Oil Co.'s No. 1 Edwards Land Co., Sec. 23-6n-4w, 1,200 ft. N and E from center of Sec. ..... S.D. 3,050 ft.

LAMAR COUNTY

Stauffer & Kouri's No. 1 Bond, SE NE, Sec. 18-2n-14w.. Testing 2,424 ft.

LOWNDES COUNTY

Lowndes County Oil & Dev. Co.'s No. 1 Carr est., Sec. 34-17-16e, 1,320 ft. E, 330 ft. S, NW cor. Sec. ..... S.D. 2,100 ft.

MONROE COUNTY

P. J. McAlpine's No. 1 Rye, Sec. 22-15n-17w ..... Drlg. 1,475 ft.

NEWTON COUNTY

Bob Dalton's No. 1 Majure, 400 ft. N, 300 ft. E, SW cor. SE, Sec. 25-4n-11e ..... S.D. 1,520 ft.

NOXUBEE COUNTY

Thompson & Donohue's No. 1 Donohue, Sec. 25-16n-17e.. S.D. 1,735 ft.

RANKIN COUNTY

Ferguson Fuller et al's No. 1 Ivey, 120 ft. W and S NE cor. NW, Sec. 13-5n-1e ..... Drlg. plug 2,369 ft.

Majestic O. & G. Co.'s No. 1 Elton Lbr. Co., Sec. 10-4n-3e. Derrick.

SCOTT COUNTY

M. U. Culley et al's No. 1 Owens, Sec. 2-8-9 ..... S.D. 750 ft.

Wildcat Operations in Alabama

LAMAR COUNTY

(Cable tools)

Company, well, farm name, section and block—	Remarks:
DeSoto O. & G. Corp.'s No. 1 Gardner, NW NW, Sec. 22-15s-16w	Setting liner 3,125 ft.

MOBILE COUNTY

Ohio Oil Co.'s No. 1 James Bethel, 330 ft. N and E, 3,300 ft. E of NW cor. SW SE, Sec. 34-3s-2w ..... Drlg. shale 5,500 ft.

J. C. Prine et al's No. 1 M.&O.R.R., Sec. 23-2n-4w ..... Drlg. shale 2,375 ft.

WASHINGTON COUNTY

South Alabama O. & G. Co.'s No. 1 Wilson, Sec. 24-7n-1w. Rigging up.

MARKET RECORD OF OIL SECURITIES

By A. E. MOCKLER

NEW YORK, Aug. 15.—General strength continued in the oil securities group during the past week, the market moving in sympathy with the general trend. The advance in stock prices has already far outstripped the most optimistic hopes of interests which have been bullish since mid-year, and it is evident from recent volume of trading that public support has once again come to the fore strongly, although banking support was credited with initiating the advance.

Ohio Oil

During the first six months of 1932, Ohio Oil Co. has increased its holdings of its 6 per cent preferred stock by 7,525 shares, the amount in the treasury at the end of June being 14,515 shares. During this period, the range of the stock on the New York Curb Exchange was 60 to 76¼, but the stock has sold recently up to 78. The cumulative preferred, of which 580,713 shares were outstanding June 30, including those held in the company's treasury, is the only capital obligation prior to the common stock, of which 6,562,406 shares are outstanding. The cumulative preferred was issued in 1930 when Ohio acquired Illinois Pipe Line on an exchange of three shares of Ohio preferred for each share of Illinois Pipe.

For the first half of 1932, Ohio Oil reports net profit of $4,098,198, equal to 36 cents a share on the common. Current assets as of June 30 were $32,231,626, with current liabilities $3,104,952, a ratio of better than 10 to 1.

The company has declared a dividend of 20 cents a share on the common and the regular $1.50 quarterly dividend on the preferred, payable September 15 to stock of record August 20, and the preferred payable September 15 to stock of record September 6.

Buckeye Pipe

Buckeye Pipe Line Co. has declared a quarterly dividend of 75 cents per share, payable September 15 to stock of record August 19. In the previous quarter $1 per share was paid.

Pan American

Pan American Petroleum & Transport Co. has declared a dividend of 20 cents per share on the common and "B" common, both payable September 15 to stock of record August 16. This represents an adjustment payment, representing a change in payment dates to the fifteenth of March, June, September and December.

General American

General American Tank Car Corp. and subsidiaries report for the six months ended June 30 net profit of $769,000 after charges, depreciation and Federal taxes, or $1.02 a share on 751,638 shares of no par common. This compares with $2,475,000, or $3.02 a share on 818,833 shares, in the first half of 1931.

Southern Pipe

Southern Pipe Line Co. has declared a quarterly dividend of 15 cents per share on the $10 par stock, payable September 1 to stock of record August 15. The last previous payment was made June 1 and was 35 cents per share.

Amerada Corp.

Amerada Corp. reports for the June quarter net income of $327,160 after expenses, taxes, depreciation, abandonments, drilling costs, etc., compared with net loss of $536,450 in the same quarter last year. The earnings were equal to 43 cents a share on the common stock outstanding in the hands of the public. For the first six months of 1932 the company reports net income of $552,544, equal to 72 cents a share, as compared with net loss of $478,225 in the first half of 1931.

Twenty Representative Stocks

The Oil and Gas Journal's weekly average price of 20 representative petroleum stocks listed on the New York Stock Exchange and New York Curb based on closing quotations for Wednesday, was as follows:

Jan. 20	13.14		May 4	11.73	
Jan. 27	12.79		May 11	13.23	
Feb. 3	13.19		May 18	12.57	
Feb. 10	12.02		May 25	12.44	
Feb. 17	13.28		June 1	11.34	
Feb. 24	13.45		June 8	11.39	
Mar. 2	13.61		June 15	11.86	
Mar. 9	14.38		June 22	11.41	
Mar. 16	13.00		June 29	12.09	
Mar. 23	13.02		July 6	11.75	
Mar. 30	13.85		July 13	12.19	
Apr. 6	12.12		July 20	12.47	
Apr. 13	11.31		July 27	14.50	
Apr. 20	12.11		Aug. 3	15.18	
Apr. 27	12.46		Aug. 10	17.21	

Tide Water

Tide Water Associated Oil Co. and subsidiaries report for the June quarter net profit of $1,157,097 after all charges and reserves, as compared with net loss of $885,888 in the second quarter of

Independent Oils on New York Curb

Quotations Compiled by Francis, Bro. & Co., Associate Members of New York Curb, Kennedy Building, Tulsa, Okla.

(Complete record week ended August 6)

1932 High	1932 Low	Week ended Aug. 6 Sales	Week ended Aug. 6 High	Week ended Aug. 6 Low	Close Aug. 16	Stocks—		Outstanding capital	Par value	Div. rate	Payable or last paid	1929 High	1929 Low	1930 High	1930 Low	1931 High	1931 Low
¾	¼	2,200	⅛	⅛	⅛	American Maracaibo	(sh)	700,000	N.P.	....	.....	8⅝	1⅛	4½	½	1¾	¼
2¾	¾	1,000	2½	2⅛	2⅛	Arkansas Natural Gas	(sh)	4,084,225	N.P.	....	.....	26	3¾	16¾	4⅝	6½	1⅞
2⅝	½	13,000	2⅝	1⅞	2½	Arkansas Natural Gas "A"	(sh)	3,522,521	N.P.	....	.....	24¾	6½	16⅝	4⅝	6¾	1⅞
5½	1½	200	3¾	3½	3½	Arkansas Natural Gas pfd.	(sh)	2,193,000	$10	....	4- 1-32	9	4	8½	6¼	7	3⅞
9¾	7	No sales	..	..	..	British American Oil Corp.	(sh)	2,622,642	N.P.	20cQ	7- 2-32	62	7⅞	23	13⅜	16⅞	6¼
¾	¼	700	½	½	..	Carib Syndicate		$131,250	25c	....	.....	4⅞	1	2¾	⅝	2⅝	¼
6⅞	1¼	116,600	4⅛	3½	5	Cities Service	(sh)	36,418,721	N.P.	30cA§	6- 1-32	68⅛	20	44¼	13	20¾	5
53⅜	10	1,600	24	17⅛	26½	Cities Service pfd.	(sh)	1,125,931	N.P.	50cM	6- 1-31	98¾	84	93⅞	78¼	84¾	35⅝
⅛	1/16	No sales	..	..	..	Colombia Syndicate		3,250,000	N.P.	....	.....	..	..	21	3⅜	7⅛	1
1⅞	½	10,800	1¾	¾	1⅞	Columbia Oil & Gasoline v.t.c.	(sh)	$2,000,000	$1	....	.....	2	½	⅝	⅛	½	1/16
1	¼	4,700	1	¾	..	Colon Oil	(sh)	2,200,000	N.P.	....	.....	15	3⅛	8¼	1⅛	3⅛	¼
1⅜	1	No sales	..	..	..	Consolidated Royalty Oil Co.		$5,527,880	$10	5cQ	4-25-32	11⅛	2½	5⅞	2	2¾	1
1	¼	100	⅞	⅞	..	Cosden Oil	(sh)	323,950	N.P.	....	.....	135	42	74¾	1¼	3⅜	⅜
4	1⅝	No sales	..	..	..	Darby Petroleum	(sh)	609,696	N.P.	....	10-15-30	26	6½	21¾	4¼	5	1⅜
2⅛	1	300	2	1⅞	2	Derby Oil & Refining	(sh)	500,000	N.P.	....	.....	11	2	11	2	6	1½
24½	10½	No sales	..	..	..	Derby Oil & Refining pfd.		48,500	N.P.	....	.....	44	20¾	60	30	40⅛	25
41	23	15,800	37¾	32	39⅜	Gulf Oil Corp.	(sh)	4,504,921	$25	....	10- 1-31	209	115	166⅞	58½	75½	25⅜
4½	2½	200	3⅜	3¼	3⅝	Indian Terr. Illum. Oil "B"	(sh)	7,090,037	N.P.	....	.....	..	..	53½	12⅝	16⅞	5
¼	1/16	100	⅛	⅛	1/16	Intercontinental Petroleum		$5,682,000	$5	....	.....	2⅞	⅜	1⅜	⅜	⅝	⅛
⅝	¾	No sales	..	..	..	Kirby Petroleum	(sh)	750,000	N.P.	....	.....	3⅝	1¼	3	⅞	1⅞	¼
¾	⅛	600	1/16	½	..	Leonard Oil & Development		$50,000,000	$25	....	.....	14⅞	2½	5	¾	2	½
⅞	½	1,000	¾	¾	..	La. Land & Exp.	(sh)	3,000,000	N.P.	....	.....	6⅛	1	4¾	½	1½	¼
2½	⅞	300	2½	2¼	..	Lion Oil & Refining	(sh)	250,000	N.P.	....	10-27-30	38⅞	18	29	4⅞	6¾	1½
9¼	3⅜	3,300	7	6⅛	8¼	Lone Star Gas	(sh)	5,000,000	N.P.	16cQ‡	6-30-32	67⅞	28	55⅞	19⅝	25	5½
⅛	1/16	No sales	..	..	..	Magdalena Syndicate	(sh)	850,000	$1	....	.....	1¼	½	½	⅛	½	⅛
6⅛	3¾	No sales	..	..	..	Margay Oil Corp.		160,000	N.P.	25cQ	4-11-32	38½	14	16	3	5	1⅞
5¼	1⅝	400	3	2⅝	..	Memphis Natural Gas	(sh)	920,000	N.P.	15cQ	4-15-32	24	8½	22¼	7½	12⅛	4½
2	1½	No sales	..	..	..	Mexico-Ohio Oil Co.		500,000	N.P.	....	.....	6¾	2¼	7½	1¾	4⅞	1½
⅛	⅛	No sales	..	..	..	Mountain & Gulf		$4,000,000	$1	....	4-15-31	1½	½	¾	⅜	½	⅛
4⅛	2⅛	1,200	4	3½	4⅓	Mountain Producers		$1,682,182	$10	20cQ	4- 1-32	22⅞	7	12⅛	3¾	5⅞	2
13½	8	3,300	12½	11¾	12⅞	National Fuel Gas	(sh)	3,810,183	N.P.	25cQ	4-15-32	43⅞	23	41⅜	19⅜	26½	9⅜
¾	⅜	200	¾	¾	..	New Bradford Oil		$7,224,186	$5	....	4-15-31	5	2½	3½	1⅛	1½	½
1	⅜	500	⅞	⅞	1	New Mexico and Arizona		$1,000,000	$1	....	.....	9⅜	2¼	7¼	1½	3	¾
1	⅝	400	1	1	..	North Central Texas	(sh)	262,446	$5	....	9- 2-30	18½	6⅛	11¼	2⅛	3¼	⅝
⅜	1/16	300	1/16	1/16	¼	North European Oil	(sh)	1,372,391	N.P.	....	.....	..	..	6¼	⅝	2⅛	¼
6¼	3	100	3¾	3¾	4½	Pacific Western Oil	(sh)	1,000,000	N.P.	....	.....	26⅝	12⅛	19½	5½	15	2⅞
⅛	1/16	No sales	..	..	..	Pandem	(sh)	1,291,403	N.P.	....	.....	3½	½	2½	¼	½	1/16
⅝	1/16	No sales	..	..	⅝	Pantapec Oil	(sh)	1,595,500	N.P.	....	.....	10½	1⅞	4⅜	⅞	2	⅜
10⅞	6	6,800	9⅝	7⅜	10	Plymouth Oil	(sh)	1,050,000	$5	25cQ	7- 1-32	37	22	27½	16¼	19	6
½	1/16	400	⅛	⅛	..	Reiter-Foster	(sh)	388,584	N.P.	....	12- 2-29	8½	1⅛	5⅜	1	3⅛	¼
1	¼	No sales	..	..	..	Richfield Oil pfd. x.w.	(sh)	399,950	$25	....	.....	31½	22	23½	6½	11	¼
1⅝	⅝	No sales	..	..	..	Ryan Consolidated	(sh)	296,931	N.P.	....	.....	11	2	8⅝	2	3	⅝
½	⅛	No sales	..	..	..	Salt Creek Consolidated	(sh)	1,286,300	$10	....	4- 1-31	5⅞	1⅞	2½	½	1⅜	⅛
5⅛	2⅞	3,000	5⅛	4⅝	4⅞	Salt Creek Producers	(sh)	1,496,859	$10	25c	8- 1-32	25⅞	9	15¼	5¼	7¾	2⅜
⅝	¼	1,200	1/16	½	½	Sunray Oil	(sh)	1,163,185	$5	....	4-15-31	12	5⅝	10	2	5¼	¼
6¾	4½	400	6⅝	6⅝	..	Texon Oil & Land	(sh)	936,036	N.P.	25c	6-30-32	23	7⅛	19½	8	12⅞	2½
½	⅛	4,500	⅜	1/16	..	Venezuelan Petroleum	(sh)	755,090	$5	....	2-15-30	6½	1¾	4½	⅜	1⅞	⅛
2	1⅛	No sales	..	..	..	Woodley Petroleum		$500,000	$1	....	3-31-29	9½	2	5	½	3½	1⅛
⅝	⅛	400	⅜	⅜	7/16	Y Oil & Gas		100,000	N.P.	....	.....	2⅞	½	2½	⅝	2¼	¼

*Ex-dividend. ‡Payable in stock. §Paid in lieu of regular cash dividend of 2 per cent.

1931. For the first half of 1932 the company and subsidiaries report net profit of $2,099,700.

Tide Water Oil Co., principal unit, reports for the first half of the year a net profit of $1,159,803, equal to 30 cents a share on the 2,191,823 shares outstanding. This compares with net loss of $2,008,572 for the first half of 1931. For the June quarter the company showed net profit of $1,151,300, against loss of $863,227 in the second quarter of 1931.

Associated Oil Co. showed net profit of $1,358,478 for the half year, equal to 59 cents a share on the 2,290,412 shares of $15 par capital stock outstanding. In the first half of 1931 the company showed net of $1,111,308, or 49 cents a share. The June quarter profit was $630,742, against $727,736 in the comparable quarter last year.

The consolidated balance sheet of Tide Water Associated and subsidiaries as of June 30 reflects the reduction of the stated value of its no-par common stock to $10 a share, approved by stockholders May 5. The capital surplus of $34,097,880 created by this reduction completely absorbed the revaluation of assets and the write-offs of unrecoverable and intangible assets under the plan which became effective May 5.

Standard Oil Stocks on New York Curb

Quotations Compiled by Francis, Bro. & Co., Associate Members of New York Curb, Kennedy Building, Tulsa, Okla.

(Complete record week ended August 6)

1932 High	1932 Low	Week ended Aug. 6 Sales	Week ended Aug. 6 High	Week ended Aug. 6 Low	Close Aug. 10	Stocks—		Outstanding capital	Par value	Div. rate	Payable or last paid	1929 High	1929 Low	1930 High	1930 Low	1931 High	1931 Low
6¼	6	No sales	..	..	..	Borne Scrymser		$1,000,000	$25	....	10-15-30	46½	25	25	11¾	16	6
35	17½	No sales	..	..	24½	Buckeye Pipe Line		$10,000,000	$50	75cQ	9-15-32	74½	55	69	39⅞	56	30
90	53	200	79	77⅛	..	Chesebrough Mfg.		$3,000,000	$25	$1Q‡	6-30-32	210	130	184⅞	104¼	129½	75
3	1¾	2,000	2⅞	2½	2⅞	Creole Petroleum	(sh)	5,977,872	N.P.	....	.....	11¾	5⅜	7⅞	3	3⅞	1⅝
35	18	250	28½	24⅞	..	Eureka Pipe Line		$5,000,000	$100	$1Q	8- 1-32	70½	40	54¾	26	36	19
51½	35⅝	1,600	51⅝	45½	51½	Humble Oil & Refining		$74,103,300	$25	50cQ	7- 1-32	128	74⅛	119	57¼	72	44¼
10	6¼	12,400	10	8⅛	9⅝	Imperial Oil of Canada	(sh)	26,557,496	N.P.	12½cQ	9- 1-32	41	22	30	15	18¼	7⅝
7½	2¾	100	4	4	..	Indiana Pipe Line		$3,000,000	$10	10cQ	5-14-32	41⅞	26	41	14½	21⅛	5½
10¾	8	8,100	10½	9⅝	10¾	International Petroleum	(sh)	14,247,088	N.P.	25cQ	6-15-32	30⅜	15	24	11⅜	15½	7⅝
10½	6	100	8	8	..	National Transit		$6,362,500	$12.50	25cQ	6-15-32	25⅛	10⅛	22⅜	11½	17½	5
5½	2¼	400	4⅞	4⅜	5	New York Transit		$500,000	$5	10cQ	4-15-32	17½	10	21⅜	10⅛	14½	5⅛
4¾	3⅛	200	3¾	3¾	..	Northern Pipe Line		$1,200,000	$10	25c	7- 1-32	63	41	54	26¼	35½	20
9	4	100	8	8	..	Penn Mex Fuel		$10,000,000	$25	50c	5-25-32	44½	20	32	12	15½	5½
14⅞	9⅝	300	14½	14	14⅞	South Penn Oil		$30,000,000	$25	25cQ	6-30-32	60¼	35⅛	45⅞	16⅛	23⅞	9¼
10	5	No sales	..	..	..	Southern Pipe Line		$1,000,000	$10	15cQ	9- 1-32	22½	13	20⅞	8⅜	17	7
37	27	No sales	..	..	..	Southwest Pennsylvania Pipe Line		$1,750,000	$50	$1Q	7- 1-32	70	60	64	32	42½	25
23¾	13⅛	31,900	22½	20⅞	23½	Standard Oil of Indiana		$424,914,895	$25	25cQ	9-15-32	63	45	59⅞	30	38½	13½
15⅞	8⅞	5,600	13¾	12½	14	Standard Oil of Kentucky		$25,654,516	$10	30cQ	6-30-32	46⅞	29	40½	18⅝	23⅝	12⅛
19	10¼	200	15	14¼	..	Standard Oil of Nebraska		$4,770,550	$25	25cQ	9-20-32	50¼	40	48⅞	34⅝	36½	16
30¼	15½	600	26¾	24½	30¼	Standard Oil of Ohio		$18,811,675	$25	62½cQ	7- 1-32	129	60	108½	43¼	62½	23
2	1⅝	100	2	2	..	Swan-Finch Co.	(sh)	34,480	$25	....	1-15-29	18	10	10	4	4½	1

*Ex-dividend. †Unit of trading less than 100 shares. ‡Plus 50 cents extra.

Transactions in Oil Shares on New York Stock Exchange

Quotations Compiled by Francis, Bro. & Co., Members of the New York Stock Exchange and Associate Members of New York Curb, Kennedy Building, Tulsa, Okla.

(Complete record week ended August 6)

1932 High	1932 Low	Week ended Aug. 6 Sales	Week ended Aug. 6 High	Week ended Aug. 6 Low	Close Aug. 10	Stocks—		Outstanding capital	Par value	Div. rate	Payable or last paid	1929 High	1929 Low	1930 High	1930 Low	1931 High	1931 Low
20½	12	4,400	18½	17	20	Amerada Corp.	(sh)	844,200	N.P.	50cQ	1-30-32	42⅝	17½	31½	16½	23	11¼
4	¼	No sales	..	..	..	American Republics Corp.	(sh)	209,180	N.P.	..	12-31-30	64¾	12½	37	5⅛	12⅜	1¼
15	6½	20	15	15	..	Associated Oil		$44,356,180	$15	25cQ	4-15-32	47¼	34½	51	30	31	8¾
19	8⅝	93,100	17⅝	15⅛	18⅞	Atlantic Refining		$67,416,050	$25	25cQ	6-15-32	77⅞	30	51⅝	16⅝	23⅝	8⅝
6½	3⅜	61,300	6	5	6⅛	Barnsdall Corp. A		$11,293,895	$5	....	5-11-31	49½	20	34	8⅝	14½	4
16⅛	4¼	140,300	12¼	8⅜	14⅝	Columbia Gas & El.	(sh)	11,684,220	N.P.	25cQ	5-15-32	140	52	87	30⅝	45⅝	11⅝
11	9	No sales	..	..	..	Colonial Beacon Oil	(sh)	1,444,970	N.P.	....	12-22-22	32⅞	12½	20⅜	8¾	10½	7½
9	4	114,800	8⅛	7¼	8¾	Consolidated Oil Corp.	(sh)	14,190,000	N.P.	....	.....	..	..	..	..	..	..
7⅜	3⅝	62,700	7¼	6¼	7⅜	Continental Oil of Delaware	(sh)	4,738,594	N.P.	....	12-15-27	47⅞	18	30½	7¾	12	5
35¾	9½	32,200	16⅜	13½	17⅛	General American Tank Car	(sh)	751,638	N.P.	25cQ	7- 1-32	123⅜	75	111⅞	53⅛	73⅛	28
15½	4¾	8,800	11⅜	8¾	12⅜	General Asphalt	(sh)	413,333	N.P.	25cQ	6-15-32	94¾	42¼	71½	22⅝	47	9⅝
24⅜	8¾	27,600	17¾	13⅞	20⅝	Houston Oil		$24,968,600	$100	....	10-17-30	109	26	116⅞	29¼	68½	15¾
1⅝	1	400	1¼	1¼	..	Indian Refining		$12,564,070	$10	....	10- 1-30	53	13⅛	17	2	4⅝	1⅛
2¼	½	400	1¾	1½	..	Louisiana Oil Refining	(sh)	1,309,069	N.P.	....	.....	18	7	12	3½	4½	1
1½	⅜	1,200	1½	1	1⅛	Maracaibo Oil	(sh)	330,000	N.P.	....	.....	18½	5⅛	10⅜	1⅞	3¾	½
7¾	3¾	21,600	7½	6¼	7⅝	Mid-Continent Petroleum	(sh)	1,857,912	N.P.	....	2-16-31	39⅞	22⅛	32	11	16⅜	5
9¼	3½	400	8	6	8	National Supply of Delaware	(sh)	390,879	$50	....	5-15-31	144	98½	124¾	60	70¼	5
11	5	95,100	10⅝	8⅜	11	Ohio Oil	(sh)	6,562,406	N.P.	20cQ	9-15-32	79⅞	64¼	32	16	19½	5⅛
9⅝	6	No sales	..	..	..	Pan American P. & T.	(sh)	1,000,000	$5	20cQ	9-15-32	69	40½	46½	42	35⅛	20
12	7¼	900	11½	10¼	11⅞	Pan American P. & T. "B"	(sh)	2,474,288	$5	20cQ	9-15-32	69¼	40½	67¼	30	36½	18
1¼	½	500	1¼	1	..	Panhandle P. & R.	(sh)	199,370	N.P.	....	.....	15¼	3	12¾	1¾	4¼	⅝
7⅞	2	56,836	6½	5⅝	7½	Phillips Petroleum	(sh)	4,156,908	N.P.	....	1- 2-31	47	24¼	44⅝	11½	16⅝	4
½	¼	1,200	½	⅜	½	Pierce Oil Corp.		$29,622,831	$25	....	.....	3⅜	1	2½	½	1½	¼
1⅜	½	2,500	1¼	1⅛	1⅜	Pierce Petroleum	(sh)	2,500,000	N.P.	....	2-16-31	5⅞	½	7⅛	1⅛	3⅜	½
8½	3½	700	8	7⅜	8½	Prairie Oil & Gas		$61,035,800	$25	....	3-31-31	65⅜	40½	54	11¼	20⅜	4½
12	5½	1,400	11¼	10⅜	12	Prairie Pipe Line		$101,250,000	$25	....	6-30-31	65	45	60	16⅝	26½	5⅞
1⅝	⅛	400	½	½	⅝	Producers & Refiners		$37,438,950	$50	....	9-15-23	25⅞	4	11⅞	1	6	1
9¾	1	80	8	6⅛	8	Producers & Refiners pfd.		$2,845,350	$50	....	5- 4-25	46¾	25½	40	11½	16	3
6¼	2⅞	14,500	5½	4¾	6⅛	Pure Oil		$75,959,250	$25	....	9- 1-30	30¾	20	27¼	7⅝	11⅞	3¼
1⅝	¼	3,400	¾	⅝	¾	Richfield Oil (new)		$52,410,875	N.P.	....	.....	49⅝	20	9¾	4⅛	6⅜	⅝
3½	1¾	12,300	3	2½	3¼	Rio Grande Oil	(sh)	1,236,270	N.P.	....	7-25-30	42½	15	25¾	5	10¼	1¼
23	12⅛	8,700	22	18¼	20¾	Royal Dutch N. Y.	(sh)	611,303	....	80½cf	8- 5-32	64	43⅛	56½	36⅞	42⅝	13
14⅜	6⅝	139,100	13	9⅞	14⅛	Seaboard Oil of Delaware	(sh)	1,244,383	$4	10cQ	6-15-32	59⅜	8¼	37	9¾	20¾	5½
15¾	8	40	14	14	..	Shell Transport & Trading Co.		£23,985,000	£1	53cf	7-22-32	51½	40⅝	48⅜	26	34	5
7⅛	2½	45,200	6½	4¾	6¾	Shell Union Oil	(sh)	13,066,497	N.P.	....	6-30-30	31¾	19	25½	5¼	10¼	2½
48	18	5,600	48	42½	43⅜	Shell Union Oil pfd.	(sh)	400,000	$100	....	7- 1-31	108¼	93	106¼	55	78	15
7	3¼	3,500	6⅛	5½	7	Simms Petroleum	(sh)	600,000	$20	....	9-15-30	40⅛	15	37	5⅝	11	3½
5	2½	3,800	4⅞	4	4⅞	Skelly Oil		$27,441,250	$25	....	12-15-30	40½	28	12	10⅛	12⅞	2
29	12	500	26¼	22¼	29	Skelly Oil pfd.	(sh)	119,800	$100	....	5- 1-31	..	..	99¾	42	62	10
11⅜	5¼	72,100	11	9⅞	11⅝	Socony-Vacuum		$793,613,588	$25	20cQ	9-15-32	..	..	106⅜	98	106	87½
91½	81	1,800	87½	87	88½	Standard Oil Export pfd.	(sh)	764,885	$100	$2.50SA.	6-30-32	..	..	..	..	21	8⅜
28⅛	15⅜	59,600	28⅛	24¼	28⅛	Standard Oil of California	(sh)	13,102,900	N.P.	50cQ	9-15-32	81⅞	51½	75	42½	51⅝	23¼
12¾	7	1,800	12¾	11⅛	12	Standard Oil of Kansas		$8,000,000	$25	....	3-16-31	33¾	18	49	14⅜	19	7¾
36¾	19⅞	174,900	35⅞	29½	35¾	Standard Oil of New Jersey		$637,961,700	$25	25cQ‡	9-15-32	83	49	84⅞	32½	52½	26
32⅞	24¾	300	32	32	31⅞	Sun Oil	(sh)	1,416,869	N.P.	25cQ	9-15-32	68⅜	55	70	39	45¼	26¾
1⅛	¼	8,000	1	½	1	Superior Oil Corp.	(sh)	766,979	N.P.	....	12-20-30	24	5¼	9⅜	¾	1⅜	¼
17⅜	9¼	63,500	15¾	13	16¾	The Texas Corporation		$246,204,900	$25	25cQ	7- 1-32	71⅞	50	60½	28¼	36¼	9⅞
4	1½	10,800	4	2⅞	3½	Texas Pacific Coal & Oil Co.		$9,304,890	$10	....	12-31-29	23⅞	9½	14½	4	6½	1⅝
9	5	No sales	..	..	..	Tide Water Oil	(sh)	2,191,823	N.P.	25cQ	6-30-32	40	14	31	13	18	9⅞
58½	30	300	58½	50	51⅞	Tide Water Oil pfd.	(sh)	199,446	N.P.	$1.25Q	5-15-32	97½	85⅛	94⅞	71	83	30
5¼	2	29,200	4¼	3½	5¼	Tide Water Associated	(sh)	5,560,424	N.P.	....	2-16-31	23½	10	17¾	5⅞	9	2⅛
50	20	2,100	46	42½	50	Tide Water Associated pfd.		$73,284,500	....	$1.50Q	7- 1-32	90⅞	74⅛	89¾	55	68	20½
13⅞	8	20,200	13⅛	10½	13⅛	Union Oil of California		$108,651,750	$25	25cQ	8-10-32	57	42⅛	50	10⅛	26⅝	11
19¼	11¾	700	15	13	..	Union Tank Car	(sh)	1,254,048	N.P.	35cQ	9- 1-32	163¾	121⅞	38½	23	25½	16
1½	½	100	1¼	1¼	..	Warner-Quinlan	(sh)	632,948	N.P.	....	7- 1-30	42⅞	15	27	4¼	7⅜	⅞
7	2¾	17,000	6¼	4⅝	7	Wilcox Oil & Gas	(sh)	428,967	$5	...	5-10-28	29¾	12⅞	21	6½	9⅝	2¾

*Ex-dividend. †Interim dividend for 1931. ‡Plus extra dividend of 25 cents.

In comparing highs and lows for the several years in the three tables, it will be necessary to take into consideration cases where there have been stock split-ups.

TECHNICAL QUESTIONS ANSWERED

By Charles K. Francis, Ph. D., Technical Editor

This department of The Oil and Gas Journal is devoted to the manufacturing branches of the oil industry.

Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit their problems to Dr. C. K. Francis, technical editor. The department was created for the purpose of aiding managers, superintendents, engineers, chemists and all those engaged in the various phases of plant operation; also those connected with marketing and utilization of petroleum products.

Questions should be submitted in as much detail as possible so as to assure a satisfactory answer.

All inquiries should be signed and if other than the given initials are to be used please indicate the desired letters.

Questions involving patented processes, intricate formulas, and calculations and estimates of costs, for obvious reasons, cannot be answered. The replies will appear on this page within a reasonable time.

Ammonium Amalgam Causes Explosions

The reason for the explosion of ammonia containers is not always easy to determine. The presence of mercury is considered hazardous and an explanation for this is offered by R. S. W.—Editor.

In The Oil and Gas Journal, May 12, 1932, page 89, last column, you answer a question concerning ammonia explosive conditions. Being manufacturers of ammonia refrigerating equipment, we have had some experience with the handling of ammonia and thought possibly we might be able to give you a more complete explanation of the explosions which occurred as outlined in your article.

Ammonia mixed with water and mercury forms an ammonium amalgam which is a frothy substance and incidentally a metal. When water, ammonia and mercury are mixed together under usual room conditions, although exact conditions are not known, this amalgam will form causing a tremendous increase in volume, and hence, liable to produce an explosion in any closed vessel.

There was one manufacturer of small ice machines using ammonia as refrigerant in which mercury was used as a piston. After having several of these ice machines in the field several explosions occurred, and the cause was finally traced to the fact that in some of the machines this amalgam was formed causing a tremendous increase in volume of mercury and ammonia, hence, the explosion.

In your article I noticed that the manometers were cleaned of dirt and iron rust by means of an air blast, and it seems quite possible that this air blast contained moisture, which is common with compressed air, and the mixture of water, ammonia and mercury forming an amalgam caused the explosion.

Grades of Paraffin Wax and High M.P. Wax

I should like to get in touch with some oil refiner in the United States who manufactures a paraffin wax with a melting point of approximately 165° F., and for that reason I am writing to ask if you would be so good as to advise me where this quality wax may be obtained.—E. G. A.

The U. S. Pharmacopoeia when defining refined wax (paraffinum), states that the melting point varies from 125° to 135° F. There are several grades of this wax marketed, ranging from the soft waxes (match wax), through the semi-refined waxes, fully refined wax, and finally the special waxes. The low melting point wax is quoted to run between 108° and 113° F. M.P., the semirefined wax has a melting point approximately 118°-128° F., the fully refined wax ranges between 128° and 140° F. M.P. The special waxes may be obtained up to as high as 155°-158° F. melting point. The common grades as recognized in the trade are five grades of paraffin wax, these range from 120° to 137° F. melting point, as shown each week in the price tables of The Oil and Gas Journal.

A wax of 165° M.P. would place it in the ceresin class, which commonly runs from 165° to 175° F., but may run as low as 145° F. This is the hard wax which is refined from the mineral wax ozokerite.

Gasoline From Hart County, Ky., Crude

It is almost impossible to break down the straightrun gasoline from Hart County, Kentucky, crude with sulphuric acid. The sulphur remains in the gasoline and is very corrosive. Could you give me some information regarding this oil and methods for removal?—R. J.

A partial analysis of a sample of Hart County, Kentucky, crude oil follows:

Analysis Hart County Crude

Gravity A.P.I.	42.3
Sulphur, total per cent	0.53

Distillation

	Temperature °F.
Initial	122° F.
Per cent over	
5	180
10	212
20	256
30	300
40	362
50	435
60	506
70	539

The crude oil was distilled through a Hempel column into the following grades of gasoline:

Grade—	400° E.P.	410° E.P.	437° E.P.
Gasoline, pct.	47.3	48.5	53.5
Topped crude oil	51.9	50.7	45.7
Loss	0.8	0.8	0.8

The distillation characteristics of three unrefined straightrun gasolines are indicated as follows:

Gravity A.P.I.	60.4	59.9	57.9
Initial	104° F.	106° F.	110° F.
Per cent over			
5	122	138	140
30	178	182	188
50	254	254	270
90	344	252	338
Endpoint	398	409	436

The quantity of sulphur, 0.53 per cent is not unusual, so it must be the specific form of the sulphur that is the cause of the corrosion. It is reported that there is no hydrogen sulphide evolved at the ordinary temperatures of straightrun distillation but that the gasoline retains enough sulphur to render it corrosive and that this is corrected only with difficulty.

It has been the history of high sulphur petroleums that pretreatment must frequently be adopted; because, if this is not done there will be excessive and expensive corrosion of the equipment and large quantities of treating chemicals may be required to bring the gasoline within the standard specifications for sulphur and corrosion. At this time some refiners pretreat the oil with either soda ash or sodium hydroxide, others introduce a neutralizing chemical, such as lime, into the charging stock and depend on the velocity being high enough to carry all solid material through the tubes. The quantity of lime used in this way may vary from three-fourths to 1.5 pounds per barrel. Treatment by a special method, such as the sulphur dioxide process, may produce good results, and it is possible that the vapor phase process may be especially suitable for freeing the gasoline from objectionable sulphur compounds. The use of large quantities of strong acid tend to lower the octane rating.

Air Compressor Output Free Air

What is the meaning of free air volumes used when giving the output of an air compressor?—J. B. S.

Free air means the volume of air at normal atmospheric pressure which, when measured by the barometer, is equivalent to 14.7 pounds per square inch. Pressures are stated either as absolute or gauge, and since ordinary gauges are scaled from zero, or atmospheric pressure, 14.7 pounds must be added to any gauge indication above zero when the absolute equivalent is required.

The Valve World, Crane Co., XXIX, 138, 1932, gives an article by W. A. Thomas on this subject and the calculations outlined below, taken from this source, will serve to further explain the use of the term. The volume of a gas or air is changed by pressure according to:

$$(1)\ V_2 = V_1 \frac{P_1}{P_2} \text{ and } (2)\ V_1 = V_2 \frac{P_2}{P_1}$$

Where:

V_1 = Initial volume before compressing, cubic feet.

V_2 = Final volume after compressing, cubic feet.

P_1 = Initial absolute pressure, pounds per square inch (gauge pressure + 14.7).

If 100 cubic feet of free air is compressed to 90 pounds gauge pressure, what is the volume? According to (1):

$$V_2 = 100 \times \frac{14.7}{90 + 14.7} = 14 \text{ cu. ft.}$$

Also suppose 14 cubic feet is the volume at a gauge pressure of 90 pounds, what would be the free air volume? According to (2):

$$V_1 = 14 \times \frac{90 + 14.7}{14.7} = 100 \text{ cu. ft.}$$

The influence of temperature does not have to be considered in ordinary calculations but must be used when very close figures are wanted.

Cetene Number and Diesel Fuels

Will you explain what is meant by a cetene number? How is this term used?—W. C. E.

A paper entitled "Ignition Quality of Diesel Fuels as Expressed in Cetene Numbers," was presented by G. D. Boerlage and J. J. Broeze before the recent convention of the Society of Automotive Engineers and has been published in the S.A.E. Journal, 31, Sec. 1, 282, 1932 (July). The information given here is from this source.

When investigating residual fuels it was found expedient to base all ignition data obtained on reference fuels, for which on theoretical considerations cetene, $C_{16}H_{32}$, and mesitylene, C_9H_{12}, were suggested. The former substance ignites most readily in a normal engine, the latter not at all. The routine rating of fuels has been done according to the method of measuring the difference in delay at two pressures, 15 and 30 atmospheres, and expressing the results in terms of reference fuels so as to give each fuel a "cetene number," this being the percentage in the standard fuel blend which matches the sample tested.

For ignition in oil engines, the chemical characteristics of the fuel are more important than the physical. This problem being similar to gasoline detonation problems. Between gasoline engines and oil engines the situation is fundamentally different, as the efficiency of gasoline engines can principally be improved by the use of fuels of special ignition quality, whereas the efficiency of oil engines cannot.

Data given showing that, practically speaking, the cetene values of blends do not vary from a straight-line relationship, which makes it possible to judge the quality of fuels blended from known components.

TWO TYPICAL CASES OF BLENDS

Component	Cetene No.	Fuel A pct.	Part cetene value	Fuel B pct.	Part cetene value
1	40	20	8.0	20.0	8.0
2	55	30	16.5	34.5	19.0
3	62	14	8.7	17.0	10.5
4	24	14	3.4	14.5	3.5
5	40	22	8.8	13.0	5.2
6	30	0	0.0	1.0	0.8
Ttl. (cal.)		100	45.4	100.0	47.0
Observed centene value			46.0		49.0

The data are impressive when one considers the widely varying origin of the substances used for these tests, among these being cetene derived from spermaceti, coal-tar oil and mesitylene derived from coal, three gas oils from Venezuelan and Eastern crudes and an Edeleanu extract.

Blending for Vapor Tension

In blending for Reid vapor tension please give some means for calculating proportions to blend to get certain results. For example, if you have a 12-pound and a 26-pound product and wanted to blend to 16 pounds, how much of each would you use?—C. E. B.

If the several natural gasolines have been properly stabilized and are gas free, the vapor tension of a mixture may be calculated by means of the rectangle formula which is so commonly used when blending for a desired gravity.

The desired vapor tension being 16 pounds, the blend could be made with 4 parts of the 26 and 10 parts of the 12-pound product; that is, if both products are of normal composition.

CUT YOURSELF A BIGGER SLICE

It's a thin slice, the difference between production cost and selling price. Obviously, there is but one way to add to it.

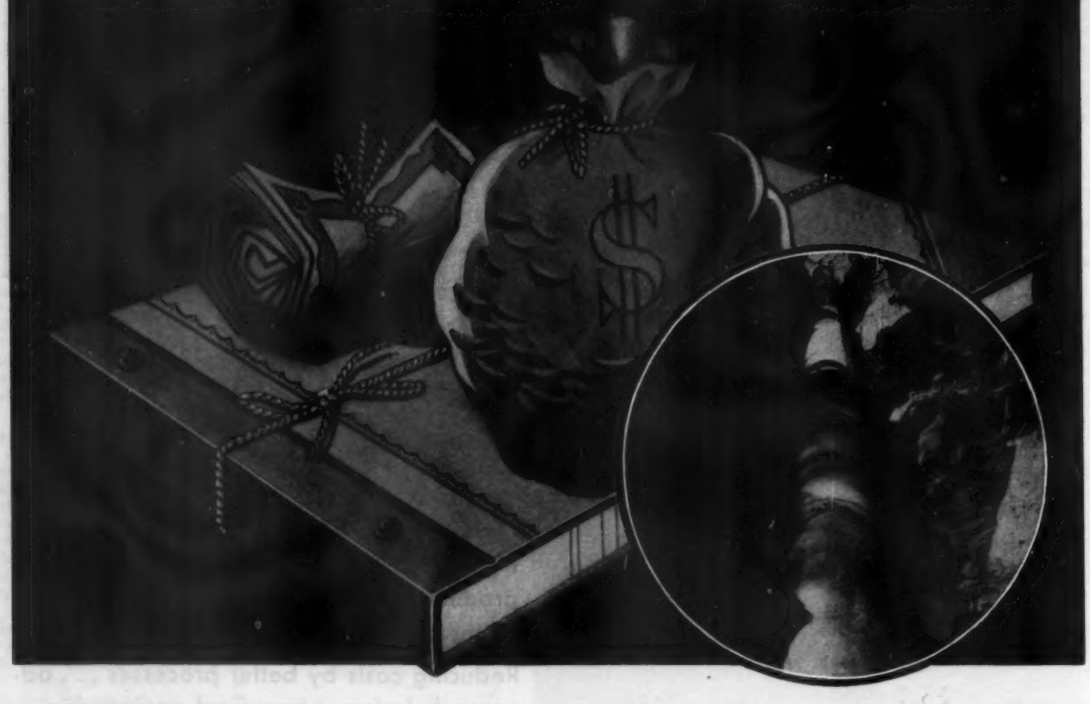
Reducing costs by better processes . . . advanced design . . . improved engineering . . . more efficient equipment . . . represents the only means of increasing profits.

There is much that is new in petroleum engineering, much that is truly modern. We have some interesting data on the production cost and yield of new Lummus equipment. May we present facts and figures?

THE LUMMUS COMPANY
50 Church Street • New York City

LUMMUS
PETROLEUM REFINING PLANTS

FOR PIPE LINES BORN WHEN MONEY IS TIGHT



Every pipe line is an engineering job, and as such must be figured with a reasonable margin of safety—to carry certain pressures—to withstand soil corrosion. Just what that margin of safety must be depends to a large extent upon the kind of pipe used.

Republic Electric Weld Pipe reduces the number of variables. The weld, according to the U. S. Bureau of Standards, is as strong as the pipe wall. The wall thickness is uniform—no thin spots to be figured on and dictating a larger margin of safety. Consequently, oftentimes a pipe of slightly lighter wall can safely be employed.

That's why we say that when pipe line dollars must be squeezed, Republic Electric Weld Pipe can save you money—in first cost, in handling cost, in transportation cost—and with no sacrifice in quality or safety of the line.

Any engineer conversant with pipe line design will quickly grasp the importance of these facts. A 64-page book which we have prepared to spread the story of this money and trouble saving pipe will gladly be sent upon request.

REPUBLIC STEEL CORPORATION
GENERAL OFFICES YOUNGSTOWN, OHIO

REPUBLIC
ELECTRIC WELD
CASING · TUBING

PERSONAL PARAGRAPHS

M. Collins, of Petrolia, Ontario, has left for the Trinidad fields under a drilling contract.

* * *

Sir Edward Manville, J.P., chairman of the Phoenix Oil & Transport Company, Ltd., has resigned from the chairmanship of the B.S.A.

* * *

E. W. (Tarni) Edwards, who has had about 21 years' service with the Royal Dutch-Shell organizations in Egypt, Mexico, Sarawak, etc., has retired.

* * *

H. C. Miller, of Chicago, general superintendent of the telephone and telegraph division of the Pure Oil Company, is in Mount Pleasant, Mich., on business.

* * *

J. H. Marsh, field scout in the Cushing district for the Carter Oil Company, has been transferred to the Kansas district. He will succeed the late Arthur D. Summers.

* * *

Edward Pickett has been appointed advertising manager of the Standard Oil Company of Louisiana. He succeeds H. C. Ferrell, who has been made director of personnel and training.

* * *

Joseph Barrett and George McDonald, of Petrolia, Ontario, have left for Odanak, Quebec, where they plan to drill. Frank Racher and David Holmes, also of Petrolia, are already drilling in the same field.

* * *

G. M. Lantz, production superintendent of the Pure Oil Company at Mount Pleasant, Mich., has been transferred to Eldorado, Ark., and Clyde R. Vinton of that city has been transferred to Mount Pleasant to take Mr. Lantz' place.

* * *

King H. Houston and Robert McDonald, of Negritos, Peru, have been spending a three months' furlough with friends in Ontario. They will leave shortly for Peru to resume their work with the International Petroleum Company.

* * *

Dr. Frank A. Moss, B.Sc., Ph.D., has been visiting Queensland. Doctor Moss has had extensive experience in geology in the United States and for four years was geologist in charge of geophysical prospecting in California for the Gulf Oil Corporation.

* * *

D. B. Collins, superintendent of the Shell Oil Company's operations in the Coalinga Field for the past 2½ years, has sailed with his family for Holland to enter the foreign service of the Royal Dutch-Shell, the parent company. John Landers succeeded Mr. Collins at Coalinga.

* * *

J. P. Hollingdale, consulting engineer with the Shell Oil Company, with headquarters at Hongkong, broke his journey to London to visit Jasper National Park, in the Canadian Rockies. Mr. Hollingdale has China, Japan and the Philippines for a territory in which he advises municipal authorities on road construction.

* * *

H. H. Johnson, major in the Texas National Guard, has returned to his work with the Gulf Production Company at Midland, Tex., after spending 11 months on duty with the guard in the East Texas Field. Major Johnson was one of the few men of the guard who was acquainted with the oil industry, therefore was extermely valuable to the State while on duty in the field.

* * *

Norman W. Foy has been appointed Chicago district sales manager of Republic Steel Corporation, by N. J. Clarke, vice president in charge of sales. Mr. Foy became associated with the old Republic Iron & Steel Company as a salesman in 1919. He was subsequently manager of the company's Buffalo, Boston and Birmingham offices, being made assistant western manager of sales shortly after the formation of the present Republic corporation.

Birgher Dahlberg is now located at Ploesti, Rumania.

* * *

R. E. Andrews, drilling contractor, Dallas, Tex., was in Tulsa a few days visiting his old friends.

* * *

Frank Jacobson, of the Continental Oil Company, Fort Worth, Tex., is convalescing after a major operation.

* * *

S. W. Emmerson, of Cushing, Okla., is on his way to Syria, where he will be engaged on the Iraq pipe line construction.

* * *

Sam Trammell, superintendent of the telegraph department for the Stanolind Pipe Line Company at Fort Worth, Tex., spent his vacation in Oklahoma.

* * *

C. H. Lieb, president of the Carter Oil Company, has returned to Tulsa after a honeymoon trip through northwestern Canada. Mr. and Mrs. Lieb will make their home at the Sophian Plaza, Tulsa.

Men of the Industry

L. S. SINCLAIR

One of the most active men in oil and tax accounting practices and on the American Petroleum Institute accounting committee, is L. S. Sinclair, recently elected comptroller of the Magnolia Petroleum Company, Dallas, Tex. Mr. Sinclair has grown up with that organization, starting as clerk in the cashier's office in Corsicana in 1914, and moving to Dallas with the company in 1915.

Mr. Sinclair was born in 1891 in Mexia, Tex., which later saw one of the largest oil booms in the State. He attended the public schools and high school there and after graduation started on his business career in a country bank in Hill County. He was made assistant treasurer of Magnolia in 1920, and comptroller June 1, 1932.

Growing up in Mexia, where there was plenty of fishing and hunting gave him zest for these sports, which still take part of his leisure time, golf being used to fill in when he does not have time to run out to the streams and fields.

Mr. Sinclair was married in 1916 and has three children. He is a Mason and a member of Hella Temple of the Shrine, Dallas. Most of his golf playing is done on the Dallas Country Club links.

S. P. Farish, president of Navarro Oil Company, has been spending a vacation in California.

* * *

Allen A. Jergins, Lawrence C. Kelly and Roy W. Young are new directors of the Oil Producers Sales Agency of California.

* * *

W. L. Connelly, chairman of the board, Sinclair Oil & Gas Company, has returned to Tulsa from a visit to Casper, Wyo.

* * *

Dr. W. T. Thom, Jr., professor of geology at Princeton University, and a party of technologists are making a survey of northern Wyoming and southern Montana.

* * *

A. G. Dana, vice president and general manager of the Prairie Oil & Gas Company of Wyoming, has retired and Mr. and Mrs. Dana have moved from Parco, Wyo., to Denver.

* * *

Lyndon L. Foley, petroleum engineer, Mid-Kansas Oil & Gas Company, Tulsa, was called to his home in Minneapolis, Minn., on August 8 because of the sudden death of his younger brother, Floyd.

* * *

John N. Troxell, who for the past 10 years has been associated with The Texas Company in subsurface work at the company's Tulsa offices, has been transferred to Houston, Tex., in the same work.

* * *

J. F. Cullen, superintendent of the Laramie, Wyo., refinery of Standard Oil Company of Indiana, has been transferred to Superior, Wis., replacing T. C. Adley, transferred to the River Rouge Lake bulk station.

* * *

A. Henrickson, chief chemist of the Continental Oil Company at Ponca City, Okla., is visiting Yellowstone National Park. En route he inspected the Glenrock, Wyo., refinery. He was accompanied by Mrs. Henrickson.

* * *

R. J. St. Germain, geologist and producer of Tulsa, is devoting considerable time in the Texas Gulf Coast section where he is having geophysical surveys made of two large blocks of acreage preparatory to testing.

* * *

C. Schnurr, who has been connected with the land and geological department of the Mid-Continent Petroleum Corporation, Tulsa, has been moved to Houston, Tex., where the company in the future will maintain a representative.

* * *

Frederick G. Clapp, widely known geologist, New York City, visited in Houston, Tex., several days and while there addressed the weekly meeting of the Houston Geological Society, telling of some of his experiences in foreign countries.

* * *

Frank McCain Brewster of Bradford, Pa., who has been appointed consulting engineer to the Turner Valley Gas Conservation Board, has arrived in Calgary, Alberta, to assume his new duties. He succeeds Frank P. Fisher of Mount Vernon, Ohio, who resigned recently to become consulting engineer to the city of Chicago in connection with a gas rates case now pending. Mr. Brewster was formerly associated with the U. S. Bureau of Mines.

* * *

R. Ogarrio, vice president of The Texas Company in charge of production, and R. F. Baker, chief geologist of the company, accompanied by A. R. Wilson, division manager of the Rocky Mountain division of the producing department, and others of the Denver organization, left Denver for a trip through Colorado, western Wyoming and Montana. A day or two will be spent in Yellowstone and Glacier parks, from which point Mr. Ogarrio and his party will leave for the West Coast for an inspection of company properties in that territory.

NATURAL GAS DEVELOPMENTS

Hearing Set at Amarillo on Panhandle Gas Outlet

AUSTIN, Tex., Aug. 13.—Railroad Commissioner Ernest O. Thompson, calling a hearing at Amarillo, August 29 for a report of a joint committee on a proposed agreement in the Panhandle gas outlet controversy before the commission, announced to the parties in the case that at the meeting an order will be issued, either embodying some satisfactory agreement worked out between the independents and the pipe line takers, or for the granting of stripping permits as sought by F. C. Henderson and others for 10 wells, or closing down the gas field entirely until a market outlet is found.

"The commission wants it understood there will be no dilly dallying in this matter," Commissioner Thompson announced. Tentative suggestions of field unitization were made and objected to by those in the hearing.

The hearing was on the Henderson application to strip gasoline while the smaller producers are without an outlet for their potential 20 per cent of the Panhandle gas.

A joint committee was named representing the commission, the pipe lines, the large producers and landowners, and asked by the commission to start work at once. Its members include E. V. Foran, engineer for the commission, chairman; J. M. McDonald, J. E. Thompson, Jr., L. M. Bolton, R. L. Wright, Ed Dunigan, J. C. Dickinson, C. J. Fowlerston, L. Hagy, T. C. Craig, H. W. Price, Ed Warren, M. T. Johnson.

Mr. Foran said an accord has been reached by a committee of persons interested in the Panhandle gas field on the fundamental principle to be included in any permanent plan to govern operations in the field. The basic principle, he said, called for operation of the entire area as a unit.

There was considerable argument over whether a temporary plan would be feasible pending perfection of a permanent solution. It appeared to be the consensus among operators that a temporary plan would be unworkable and would be destructive to any permanent plan.

Mr. Foran took the position that a temporary plan, embodying the fundamentals of a permanent order, but minus many of its details, would be an inestimable help in conserving the gas energy of the field and in preventing actual physical waste. Mr. Foran believed he could outline a temporary proposal within 15 days, unless selfish interests interfered, that would be workable from an engineering standpoint. He admitted that any temporary effort would be fraught with inequalities and imperfections, but expressed belief these details should be sacrificed to workability. He estimated it would require from three to six months to draft a plan that would permanently solve the situation.

Mr. Foran proposed that in the temporary order only the area now being effectively drained be taken into consideration. The permanent plan, however, would treat the entire area as a unit and would provide for equitable adjustments between all persons interested, whether operators, landowners, lease holders or royalty owners.

Some operators indicated a belief that any temporary plan would lead to increased drilling of gas wells, a situation it was hoped could be averted.

The hearing was called in an attempt to obtain the basis for an order that would satisfy all interests in the field. Complaint has been made by operators that they have no outlet for their gas while large pipe line companies were taking gas from their own wells and thereby draining gas from properties of the smaller operators.

Ruhr District Now Served by Network of Pipe Lines

Combining the coke-oven gas production of over a score of Ruhr industrial enterprises, the German firm "Ruhr Gas A.G.," of Essen, distributed 798,000,000 cubic meters—more than 28,000,000,000 feet of gas to consumers in 1931, an increase in supply of 80,000,000 feet of 1930, according to a report from Trade Commissioner W. T. Daugherty, Berlin.

With 1931 construction included, this firm now utilizes a network of pipe lines totaling approximately 580 miles in length, reaching 33 cities, and supplying gas to many plants in the iron and steel, chemical and ceramic industries. Its chief accomplishment in 1931 was the establishment of a complete connection on the main Dortmund-Gelsenkirchen line, thus completing uninterrupted circulation between right and left Rhinebank service.

Direct service to Cologne was also instituted, in May, 1931, with the completion of the Duesseldorf-Cologne line. The former Rhenish-Westphalian Electrical Co. gas network was also connected with the "Rhur Gas" lines, so that, with the exception of the Hanover line and some special gas lines, the present Ruhr gas supply system represents a single entity.

The enterprise reported a net loss of 1,970,000 marks in 1931, against 1,750,000 marks loss in 1930, amortizations and other costs in connection with the development of facilities being more than great enough to overcome the advantage accruing from the 80,000,000-foot gain in 1931 sales and the increase in absolute profit of from three-fifths to four-fifths pfennigs per cubic meter of gas sold in the late year.

MICHIGAN GAS LAND

CLARE, MICH., Aug. 13.—A total of 1,120 acres of oil and gas land adjoining the field discovered and developed by the McKay and Mercier interests has changed hands after considerable litigation. The property involved was all of Section 36 of Lincoln Township and parts of Sections 30 and 31 of Hatton Township and was known as the Oxendale properties. Most of the land is just across the highway from the McKay gas field. The land was bid in by Mr. Oxendale of Lansing for $36,100. How soon it may be developed is not divulged.

OTTAWA, KANS., HEARING

The Kansas Public Service Commission has announced that it would begin the hearing of the Ottawa gas complaint September 15. The city officials of Ottawa complained to the commission that the Union Public Service Co. was continuing the three-part rate in that city which caused the citizens to pay a higher rate than other cities of the same system and asked that the company be directed to change its rates to remove the alleged discrimination.

MONTANA GAS RATES

The Montana Railroad and Public Service Commission has issued an order denying the application of the Consumers Gas Co. for an increase in rates and charges for natural gas service in Ferdig, Oilmont, Sunburst, Sweet Grass and communities in the Kevin-Sunburst Field. The commission holds the present rates are just and reasonable and that no change is desirable at the present time.

Detroit Company Rejects Michigan Pipe Line Plan

DETROIT, Mich., Aug. 15.—Holding that the supply of natural gas reserves in Michigan is undetermined, the Detroit City Gas Co. announced in a letter to the Detroit council that it is not prepared to finance any portion of a drilling program, nor to participate in the building of a pipe line. Moreover, should it be forced to build a pipe line, the company will require a bond to reimburse it for any loss it might sustain by reason of failure or exhaustion of the gas supply prior to the end of the contract period.

The company's decision was based on a report by E. L. Fischer, gas engineer of the United Light & Power Engineering Construction Co., acting as consultant, concerning the natural gas areas of the State. The city council previously had requested the company to use Michigan natural gas rather than that from other states.

William G. Woolfolk, president of the company, said, the company's attitude is based on the consultant's findings. These are quoted in the letter to the council:

"The existence of natural gas in the Michigan fields is dependent on the size and number of the irregularities of the general geological structure. These irregularities can only be located and explored through extensive drilling. Proven reserves of dry natural gas as set forth in the previous pages of this report are estimated at 23,320,000,000 feet. Casinghead gas cannot be held in reserve but must either be marketed as produced or be wasted.

"The Detroit market, if fully developed for 100 per cent natural gas, would require in one year a volume of gas equal to all of the proven reserves, together with the total estimated production of casinghead gas."

Mr. Woolfolk declared that the total gas reserve at present proven in Michigan would not warrant the expenditure of anyone of the necessary capital to pipe this gas to Detroit.

"The whole problem of Michigan gas for Detroit reserves itself into the question of how much as yet undiscovered gas there may be," he said. "This question cannot be answered until a great deal more knowledge of detailed geographical structures is obtained. Such detailed knowledge can only be had by drilling either test holes or actual wells.

"Any consideration of the life of the Michigan Field must also take cognizance of the requirements of other nearby cities whose demands would reduce the available supply for Detroit. Under these circumstances we do not see that there is any justification for bringing Michigan natural gas to Detroit until additional drilling has proven the existence of much larger reserves."

Mr. Woolfolk said the company is committed to the policy of introducing natural gas into the city as soon as a dependable supply backed by adequate reserves is available at prices which will permit "the proper development of the company's load."

He said the bond the company would require would have particular reference to any loss it might sustain in its investment of approximately $1,000,000 required to connect its system and plants to the proposed natural gas pipe line.

PACIFIC COAST ASSOCIATION

President James L. Stone announces that the thirty-ninth annual convention of the Pacific Coast Gas Association will take place August 24, 25 and 26 at the Hotel Del Monte, Del Monte, Calif.

Proposal to Buy Ft. Worth Gas System Before Council

FORT WORTH, Tex., Aug. 15.—Steps to purchase the Lone Star Gas Co.'s local distributing plant, to be financed either through money borrowed from the Reconstruction Finance Corp. or from local banks and by offering revenue bonds to the public, was urged on the Fort Worth city council by Claude Spratling. The council took no action.

Councilman William Monnig, chairman of the council's gas committee, expressed opinion bonds could be sold at this time and stated that the Shamrock Natural Gas Co., with which the city now has a contract pending for a supply of natural gas, in case of municipal ownership and operation of the distributing plant, is ready at any time to start construction of its pipe line to West Texas.

Mr. Spratling declared that the distributing system now could be bought for about $4,000,000. The council's inaction during the last year, he maintained, has cost the citizens $500,000 in excessive gas rates.

Syracuse Makes Survey Preparing for Mixed Gas

SYRACUSE, N. Y., Aug. 13.—Preparatory to the introduction of natural gas in Syracuse in a mixture with the artificial product, scheduled for October 1, the Syracuse Lighting Co. is making a survey of all gas equipment and appliances in the city to determine the number of various types of equipment and appliances that must be adjusted to use the mixed gas.

The mixed gas will be introduced into one section of the city at a time, the complete change requiring several months. The specially trained inspectors will visit a total of 65,000 buildings in making the survey.

Work is progressing on the pipe line from the town of Onondaga into Syracuse, a distance of 15 miles. The New York State Natural Gas Co., which will supply the natural gas, has completed the 20-inch main from Tioga, Pa., to the Onondaga town line, a distance of about 100 miles. Syracuse will be the first city in the State to receive natural gas from the Tioga Field.

Community Natural Rates To Be on Seasonal Basis

FORT WORTH, Tex., Aug. 15.—The Community Natural Gas Co., subsidiary of the Lone Star Gas Co., which serves 250 towns in Texas and Oklahoma, has announced that its rates will be raised for the first 1,000 feet of gas. Chester L. May, vice president of the company, said it was imperative due to the fact that bills for most of the consumers in the smaller towns are not sufficient to pay for the services rendered. However, he said the rates would be adjusted so that in the winter, when more gas is used, the bills will be less than previously.

New prices are: $1.50 for the first 1,000 feet, $1.25 for the second 1,000 feet; 75 cents for the next 3,000 feet, 50 cents for the next 20,000 feet and 45 cents for all over 25,000 feet. The present price is $1.18 for the first 1,000 feet and 67½ cents per thousand for all over 1,000 feet.

REPAIR RAWLINS LINE

Rocky Mountain Gas Co. has practically completed the repair work on its gas pipe line from the gas fields in the Lost Soldier and Ferris Fields into Rawlins. Most of the work has been done on a stretch of 3½ miles from Rawlins to the Parco tie-in.

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a New Product

Fig. 1720

600 lb. STEEL

Globe Valve

This Lunkenheimer design reflects a pronounced advance in the construction of steel valves of the inside screw type—a Bonnet-Thread-Bushing, made of an alloy selected primarily for its wear resisting properties at high temperatures. This construction, together with the specially heat treated stainless steel seat and disc should commend the valve to any user of inside screw steel globe valves.

Globe and angle patterns, screwed or flanged, with Full-way or Throttling type seats and discs are available in sizes up to 2 inches. Recommended for steam pressures up to 600 pounds at 750 degrees.

Descriptive booklet F. 591 sent on request.

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FIELD PROBLEMS FROM READERS

Edited by Thomas F. Smiley

This department is conducted in order that men connected with the drilling, producing or transporting branches of the petroleum industry may obtain aid in solving problems that confront them in their work. Readers are invited to send questions freely. These questions will be placed in the hands of persons capable of answering them authoritatively, and the answers, based on the best available information, will be published.

Each question should give as much detail as possible, especially if it involves depth of sands, types of sands and operations on adjoining or nearby properties. The source of questions will be considered confidential, and only the initials of the sender will be published. Questions involving patented processes, intricate formulas or estimates of cost cannot be answered. If an immediate answer is important, one will be given by mail when the writer requests it.

In this connection, The Oil and Gas Journal will be glad to publish articles from field men who have devised new methods or improved old ones.

Piping Gas Wells

Will you kindly advise me where I can find data on the correct method of piping gas wells? I know nothing at all about the subject and wish to gain a little knowledge from the operating standpoint. I can get to the New York public library and the American Gas Association library without a lot of trouble, so I may be able to find almost any reference you give me.—C. B. C.

An article by Charles L. Shirley, "Some Uses of Oil and Gas Separators," which is being mailed to you will give you a good idea of the proper hookup of a well and the use to which an oil and gas separator is put.

Another condition sometimes found at wells is where oil, gas and water are produced from the same flow string and the oil and water become mixed or "emulsified." When this has occurred it is necessary to treat the emulsion so that the water may be separated from the oil and the oil made suitable for running to pipe line. However, it is much more practical to prevent the formation of the emulsion, and it has been found that this can be done in many instances by producing the well into "water knockouts" at well-head pressure.

The principle underlying water knockouts is clearly stated in Technical Paper No. 209 by W. R. Hamilton, U. S. Bureau of Mines. This is quoted from in Uren's "Petroleum Production Engineering," page 489.

A more recent report is contained in Technical Paper No. 3,173 issued by the Bureau of Mines (May, 1932). It is entitled "Some Methods of Separating Oil and Water in West Texas Fields, and the Disposal of Oil Field Brines in the Hendricks Oil Field, Texas," by R. E. Heithecher. This report contains sketches of water knockout and also steel and wooden "hay" tanks and gives full details of their construction and operation with costs and capacities. It can be obtained from the U. S. Bureau of Mines, Washington, D. C.

It is suggested that you consult an article by L. G. E. Bignell, "Problems of Winkler County Solved," in The Oil and Gas Journal of September 19, 1929.

All of the foregoing references apply to the production of oil, gas and water, but for gas alone you are referred to an article in the January 23, 1930, issue of The Oil and Gas Journal, "Removing Moisture from Gas Lines," which describes a drip used to remove water from gas. An article on page 15 of the May 5, 1932, issue entitled "Wax and Water Problems in East Texas" discusses emulsions and their handling.

You state that you can reach the New York City library without much trouble. It is suggested that you also call at the library of the Engineering Societies, 29 West Thirty-ninth Street, and the American Petroleum Institute, 250 Park Avenue, as both have many references on this subject.

Most gas companies have their own types of hookup at wells and along the line and you might get in touch with engineers of some of the natural gas companies for additional information.

You will find after all that these hookups consist simply of a number of fittings suitable for the working pressure of the system and present no unusual problems in assembling, but a general knowledge of their purpose will be helpful.

Place of "Aerial Geology"

Is there any reason for supposing that increased skill in taking aerial photographs in explanatory work will lessen the demand for petroleum geologists or that will make it desirable to change the courses of study for a man planning to become a petroleum geologist?—G. R. N.

No reason is apparent for supposing that the widened use of aerial photography in exploring prospective oil areas will lessen the need of petroleum geologists, nor does there seem to be any need for changing the courses of study established for those preparing themselves for this profession unless it be to make certain additions to such courses.

"Aerial geology," as it is sometimes called, does not take the place of all geological exploration as formerly conducted, nor does it necessarily diminish the value of geophysical search, but it supplements both. It is wholly likely that aerial exploration will remove the necessity for much of the ground work done in the past, but the importance of thorough knowledge of ground work in the hunt for petroleum will remain.

Several reasons are given for the failure to put aerial photography to a more general use in exploratory work. For one thing, although many geologists and others recognize the possibilities of working out soil contacts and structural conditions from the air there are comparatively few able to distinguish the geological markers as revealed from an altitude.

Aerial geology also involves not only a thorough knowledge of the accepted facts of geological science, but also of hydrostatics, geophysics, aeronautics and photography. There are not many who have all these requisites.

Most important, however, is that aerial geology is not alone a matter of knowing how, when or where to take pictures, but of interpreting pictures after they are taken. To those who have not made a close study of geological features as revealed from the air, aerial pictures are likely to mean little. Aerial geology is not to be confused with aerial photography, which for mapping, surveying and general observation has fitted in readily with needs of the oil business.

That aerial geology will become increasingly valuable is not doubted. To what extent, however, it will figure in the uncovering of petroleum reserves remains to be seen. There is the possibility according to some enthusiasts that, in the development of the science, not only structural conditions themselves will be observed but also that areas of actual accumulation of oil and gas can be identified.

Geology never has made any pretense of going further than to select conditions favorable for the trapping of oil and gas. Neither has geophysics, although the latter advances a step in that it attempts to locate certain subsurface irregularities which may or may not be revealed through surface geology. So to suggest that by the new science of aerial geology productive and nonproductive domes and structures can be predetermined seems revolutionary, but such a belief is held by some.

In The Oil and Gas Journal of January 14, 1932, is an article by Neil Williams, "Can Aerial Geology Locate Productive Oil and Gas Areas?" which you should find of interest.

Why Was It Called That?

HURRICANE FACTORY

A plant to test full-sized airplanes at wind speeds ranging up to 110 miles an hour has been constructed at Langley Field, Virginia, by the National Advisory Committee for Aeronautics. The plant contains a wind tunnel which has an oval-shaped throat 60'x30', or three times the size of any wind tunnel in use previously. Tests of airplane models in small wind tunnels do not yield exact information as to wind stresses on aircraft in actual flight. Engineers say the new tunnel will yield information which will contribute to the safety of air navigation. On account of the high winds created in this tunnel the plant is called a hurricane factory.

Has Doubts About Story

Maybe you can suggest what would be the best course for me to follow in a situation that has arisen. Along with several other men I feel like putting down a well on a farm near here where the surface indications look good for oil according to the opinions of men who are supposed to be well informed on such subjects. There is an old well on an adjoining farm which got a good showing of oil and then was plugged with the intention of leasing more land in the neighborhood. This was many years ago and nobody seems to know all the facts, but according to the owner of the farm on which we think of drilling the company that drilled the old well got into financial trouble and went to pieces. I have tried to find a record or log of the old well, but none seems to have been kept. The thing I would like to know is whether my friends and I would be doing a foolish thing if we went ahead and drilled. There are no oil wells in the immediate district now. —D. T. T.

In the absence of any definite information concerning what was revealed by the drill in the old well on the adjoining farm, you would be acting wisely if you ignored that old well entirely in deciding upon what course to pursue. What do you know about the "good oil showing" that was found? Apparently not a thing. The whole story of the old well has become little more than legend. No record has been left to show who drilled the well, when it was drilled, how deep it went or what kind of formations were encountered. Many wells were drilled in your region during the early days of oil development and in that period no logs were kept. If oil was found the well was put on the pump (there were relatively few flowing wells according to available records) and more wells were drilled nearby. If it was a dry hole it was plugged, and that was the end of it. After a few years had passed there were few who could tell with accuracy just what the history of a certain hole in the ground was, and passing time added to the obscurity of the venture. Many of the stories told about these old abandoned holes are actually fantastic, offering no guidance whatever for subsequent operations.

It is safe to say that the presence of that plugged well on the adjoining property, if taken into account at all by a prudent oil operator, would be regarded as a reason for not drilling rather than as a reason for drilling. However, suppose you leave it out of consideration altogether, and approach the question of whether to drill or not to drill as though the district were absolutely virgin. As an initial step you might obtain from the State Geological Survey in Harrisburg such information as it can give you concerning the district in which you are interested. You may find out in this way that so far as oil is concerned the district is without favorable propspects. If this is not the case and if practical oil men look with favor upon the likelihood of finding oil on the farm under consideration, then you and your friends would do well to obtain the advice of a competent petroleum geologist.

Then follow his advice. Surely it would be much better to pay him a reasonable fee than to "take a chance" and sink a much larger amount of money in a dry hole.

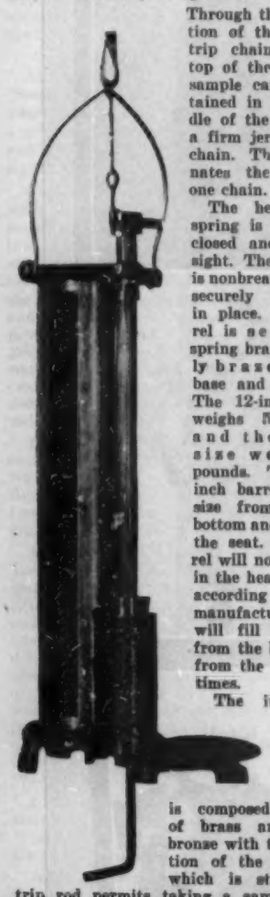
Snapshots of Oil Men Taken by Representatives of The Oil and Gas Journal

(1) George E. (Dad) Retter, President, Retter Oil Co. (2) Left to right—Clyde M. Ihrig, carpenter foreman; Marvin Cocke, fireman; Roy L. Alexander, line walker; Chris Woodward, truck driver; Coe E. Dix, chief engineer and Samuel L. Riley, engineer, Oklahoma Pipe Line Co., Council Hill Station. (3) J. B. Moore, consulting engineer, Tyler, Texas. (4) Left to right—C. L. Holloway, driller; Ed Reddock, floor man; J. T. Woodrum, floor man; W. M. Burton, fireman; Ross Strong, derrick man and C. L. Barnes, helper, Prairie Oil & Gas Co., Morgan County, Colo. (5) Left to right—Hubert Evans, welding inspector, Southern Fuel Co.; F. E. Williams, general supt.; R. A. Irwin, general foreman; J. M. Robertson, vice president; Chas. Hardy, engineer, and Geo. Willson, timekeeper, Macco-Robertson Construction Co. (6) Left to right—A. O. Olson, President, Olson Drilling Co.; H. Leslie Parker, Vice-president, Colorado Associated Oil Co., and Sidney H. Keoughan, President, North European Oil Co.

NEW AND IMPROVED EQUIPMENT

Improved Oil Thief Is Introduced by Enardo

The Enardo oil thief, made by the Enardo Manufacturing Co., Tulsa, and distributed by the W. L. Walker Co., Inc., Tulsa, can be opened and set with one hand on the handle and one hand holding the thief. No pounding or prying is necessary. It can be dumped the same way without pouring over the top.



Through the operation of the simple trip chain at the top of the thief, a sample can be obtained in the middle of the tank by a firm jerk on the chain. This eliminates the use of one chain.

The heavy coil spring is fully enclosed and out of sight. The window is nonbreakable and securely cemented in place. The barrel is seamless spring brass securely brazed in the base and top rim. The 12-inch size weighs 5 pounds and the 18-inch size weighs 6 pounds. The 2½-inch barrel is full size from top to bottom and through the seat. The barrel will not plug up in the heaviest b.s., according to the manufacturer, but will fill as much from the bottom as from the top at all times.

The instrument is composed entirely of brass and tough bronze with the exception of the trip rod, which is steel. This trip rod permits taking a sample 8 or more inches off bottom. With the use of additional extension rods almost any measurement off bottom can be obtained accurately. This trip rod is graduated each 2 inches.

All of the parts are substantially constructed of tough material. The parts are few and simple. The gauger can regrind the valve seat should it be damaged. This valve revolves slightly each time it is opened and has a tendency to keep itself tight. The pressure of the spring is always in the center of the valve.

BRIDGEPORT MAGAZINE BACK

The Bridgeport Machine Co., Wichita, Kans., which several months ago discontinued publication of the Bridgeport Driller, is represented now by the Bridgeport Bulletin, issued fortnightly. In addition to other material of general interest each issue contains the company's list of used and reconditioned tools and its offerings in used casing, line pipe, drill pipe, tubing, etc. It is sent free to anybody in the producing branch of the oil business.

Notes About Trade Literature

"Temperature Controllers" is the title of an informative bulletin of 48 pages, printed in colors, by the Foxboro Co., Foxboro, Mass. The bulletin explains the operating principle and construction features of Foxboro controllers and describes the company's line of devices in this field.

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The Maxim Silencer Co., Hartford, Conn., is distributing a four-page bulletin announcing the company's new product, the Maxim exhaust washer and silencer for gas, gasoline and Diesel engines.

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The Worthington Pump & Machinery Corp., Harrison, N. J., announces the following publications: "Portable Compressors and Contractors' Air Tools," four-page bulletin W-850-B8, illustrating complete line of equipment and explaining dealer franchise; "Hydraulic By-pass and Check Valves," two-page bulletin D-445-82, showing cross section views and listing sizes and capacities; "Steam Pumps for Highly Volatile Liquids," eight-page bulletin D-111-84 describing the Hivol close clearance pump and giving simple method for calculating the actual clearance of any steam pump.

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Illustrated descriptions of the principal products manufactured by the Babcock & Wilcox Co., 85 Liberty Street, New York, are contained in its latest catalog. The catalog not only describes the design and construction, but also gives the operating characteristics of modern equipment for power, industrial, and process plants.

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The research department of the National Radiator Corp., Johnstown, Pa., has issued a new bulletin, entitled Report CP-6, describing the design and construction of the new National condensing and cooling sections and giving the results of comparative tests.

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The Mercon Regulator Co., 1 LaSalle Street, Chicago, has appointed the following district representatives: The Laney Co., Kennedy Building, Tulsa; Ambler & Riter, Inc., 810 Fourteenth Street, Denver, Colo.; L. J. Riter, Kearns Building, Salt Lake City, Utah; and Hughes Machinery Co., Manufacturers Exchange Building, Kansas City, Mo.

The Emsco Derrick & Equipment Co., Los Angeles, Calif., has available for those who ask for it a bulletin on Emsco-Falk production and power charts for determining theoretical production and power requirements for wells 1,000 to 10,000 feet deep.

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The Caterpillar Tractor Co., Peoria, Ill., is sending out a folder describing the Caterpillar D-9900 Diesel engine and giving complete specifications.

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Roots-Connersville-Wilbraham, Connersville, Ind., offers two bulletins of oil field interest. Bulletin 21-B21 covers an application of Victor-Acme blowers in furnishing vacuum for cleaning and drying barrels, drums and tanks. Bulletin 21-B22 covers an application of R-C-W vacuum pumps, of different types, in priming centrifugal pumps, especially large sizes.

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A bulletin on squirrel-cage motors is being distributed by the General Electric Co.

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The LaPlant-Choate Manufacturing Co., Cedar Rapids, Iowa, has for distribution a bulletin describing the Hydraulic Roadbuilder for the "Caterpillar" 35.

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A reprint of the article "History and Development in the Art of Welding Ferrous Metals," by H. J. Moses has been published by the Hedges-Walsh-Weidner Co., Chattanooga, Tenn., and copies may be obtained on request to that company.

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The Superheater Co., 60 East Forty-second Street, New York, is sending on request a bulletin on Elesco superheaters for horisontal return tubular boilers.

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The improved Saybolt type Aminco viscosimeter is the subject of an illustrated bulletin obtainable from the American Instrument Co., 774 Girard Street, N.W., Washington, D. C.

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The M. W. Kellogg Co., 225 Broadway, New York, has for mailing to applicants an illustrated bulletin describing Kell-Raph copper-plated gaskets for high-temperature pipe joints.

Rubber Sleeve Absent in "Ring" Type Packer

The Lane-Wells Co., 4439 Santa Fe Avenue, Los Angeles, Calif., is introducing an improved "ring" type packer in which rubber sleeves are eliminated. Perfect sealing is said to have been accomplished by the use of five graphite-treated rings, constructed of many plies of heavy fabric surrounding a rubber core. Difficulties due to vulcanization of rubber to the casing are avoided. The graphite-treated rings are said to release readily even after four years in the well.

Large circulation clearance between the packing rings and the body of the packer speeds up running-in and coming-out operations. The body is noncollapsible.

A 16-inch packer recently set at a depth of 4,200 feet, in 80-pound rotary mud, with atmospheric pressure below the packer, carried a load calculated at 424,798 pounds. A complete seal-off is reported to have been effected and the packer removed without damage to either the casing or the packer.

Meter Company Announces Valuable New Development

The American Meter Co., Erie, Pa., announces publication of bulletin E-5, covering metric control for flow of gases and liquids and describing an important new development made possible by the metric rotary pilot valve.

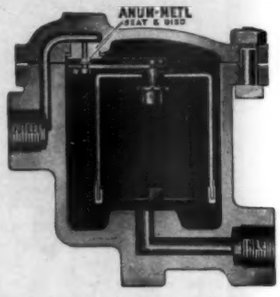
The principal new features are an automatically adjusted opening for release of pressure from the diaphragm head which greatly reduces the amount of gas used for control; the elimination of tank and outlet throttle valve control, and a simplicity which assists in adjusting and cleaning.

Changes in the time element can be made by adjustment of a single micrometer screw and the unit can be used either with an open or closed type controlled valve by a single adjustment.

A broadside sent out by the Ingersoll-Rand Co., 11 Broadway, New York, gives details concerning the Cameron Motorpump, an Ingersoll-Rand product.

Improvements Embodied in Strong Trap Design

The No. 70 and 71 Strong inverted bucket traps, recently introduced by the Strong, Carlisle & Hammond Co., Cleveland, Ohio, embody improvements in de-



sign and materials. They use the same antibalancing principle as the 20 series previously announced by the company. A valve arrangement replaces the conventional air vent hole in the bucket. This valve is so arranged that a small vent is open while the trap is in the process of filling. As the bucket begins to lose weight (which is the point where the balancing usually occurs) the valve in the bucket is opened wide to permit a quantity of steam and air to escape suddenly. This steam and air are displaced with water which causes the bucket suddenly to lose its buoyancy, sinking and opening the trap discharge valve wide.

In the 70 series traps the bucket is suspended on a tapered spindle, and the clearance between this spindle and the hole in the stainless plate on the bucket serves as the air vent. While the bucket is floating or in a filling position, the clearance is small, but as the bucket starts to sink this clearance increases rapidly and produces the effect described.

The manufacturer says that the bucket moving up and down the tapered spindle prevents the air vent from becoming clogged with sediment or oil and these traps may be used satisfactorily on exhaust steam containing oil. Tests are reported to show that either the 70 or 20 series traps fitted with the variable area air vent (antibalancing device) will handle more air in a given time, shortening the period required to build up the temperature on the equipment which the trap is draining.

The No. 70 trap is made for pressures from 0 to 125 pounds and the No. 71 for pressures from 0 to 200 pounds, both with semisteel bodies. The No. 71 trap is furnished with cast steel body and cover for pressures from 0 to 200 pounds. The steel-bodied traps are especially made for installations where superheat might be present at intervals.

Allen's 1932 Engineering Catalog Is Buyers' Guide

Allen's Engineering Catalog of the Oil Industry, Refining and Marketing Divisions, for 1932 is a book of 656 pages of interest to engineers, superintendents, purchasing agents and field men of the industry. The equipment is listed alphabetically and is fully illustrated and described, with the names and addresses of the manufacturers. A complete index makes it easy to find any given item. Specifications, dimensions and engineering data are given on the various products to enable the user to make selections with accuracy.

Among the subjects treated are compressible and incompressible fluids, form-

ulas, coefficients, exponents, extent of turbulence, effect of temperature, effects of elbows and obstructions, compound pipes, branching pipes, velocity, usual types of problems, flow of water, flow of steam, flow of high pressure air and gas, relation of compressed air to free air, flow of low pressure air and gas, flow of viscous liquids, viscosity, pipe line temperatures, streamline and turbulent flow, roots and powers chart, offset piping, correction of volumes of oils, equation of pipes, etc.

The book, which is 8½ by 11 inches is printed on enameled paper and handsomely bound in flexible fabricoid with embossed lettering. It provides an excellent buyers' guide. It is published by Allen's Engineering Catalogs, Inc., 111 North Canal Street, Chicago.

Dust Removed From Gas by Blaw-Knox Cleaning Device

The Blaw-Knox gas cleaner, made by the Blaw-Knox Co., Pittsburgh, Pa., when installed on the intake side of a compressor station protects the valves, cylinders, rings, piston rods and packing, and assures greater continuity of service. Installed at the city gate station, it protects meters and assures more accurate measurement of gas through orifice and displacement meters. Its basic principles were established by engineers in the natural gas department of the Empire Oil & Refining Co. Improvements were added by D. A. Sillers, superintendent of gas measurement of the Lone Star Gas Co. The Blaw-Knox Co., working with these engineers, has continued improving it through research in the field and in its laboratories.

Basically the Blaw-Knox gas cleaner is a contacting and separating device performing two distinct functions: First, contacting dust particles with oil (or other liquid); second, separating the oil and the oil coated dust from the outgoing gas stream. Gas entering a side nozzle under even very light pressure depresses the level of oil in the reservoir and rushing upward through the contactor tubes causes the oil to rise through the tubes, mixing with the gas and twisting and spiraling like a tornado or waterspout. This action brings any dust particles or foreign matter in the gas into intimate contact with oil. The oil has a natural affinity for dust and quickly coats the large particles and entrains in more or less fine drops or mist even the very finest particles.

Ascending, the gas passes through the first separation head into the intermediate chamber, then into the final mist extractor from which it flows clean and dry into the upper chamber and to the outlet nozzle. Run-down pipes drain each chamber, carrying the separated oil down to the reservoir in the base of the cleaner, where it is used over and over. Ample space is provided in the oil reservoir chamber for accumulation of dirt and water, and the condition of the oil as shown in the gauge glass gives notice of the need of emptying.

UNIQUE COMBUSTION PRINCIPLE

A revolutionary principle of combustion is employed in the new oil furnace announced by the General Electric Co. and marketed by its newly created air conditioning department. The furnace is designed for use primarily in homes. Economy of operation, safety, quietness, and its fully automatic operation are outstanding features. The furnace comprises a co-ordinated boiler, burner and control, designed and manufactured as one unit. The burner is of compact design, having all rotating parts mounted on one shaft and constantly lubricated under pressure by a sealed-in oil supply, and requires no manual attention to oiling. The motor has no brushes to require maintenance. The fine atomization made possible by the impact-expansion principle, worked out by General Electric engineers, produces a highly efficient, clean, semi-luminous flame and permits the use of the economical No. 3 heavy domestic fuel oil. The furnace is suitable for both steam and hot water heating systems.

Automatically Primed Pumping Unit Offered

The Worthington Pump & Machinery Corp., Harrison, N. J., is introducing a new self-contained automatically primed centrifugal pumping unit particularly adopted for water service and for use as sump pumps.

The unit comprises an electrically driven high efficiency ball bearing centrifugal pump, mounted with its motor, on a fabricated steel bedplate, together with a Monobloc priming unit of the wet vacuum type, controlled by an electric pressure switch. The priming pump, or evacuator, is an adaption of the well known "Hytor" pump, and is licensed to Worthington under patents of the Nash Engineering Co.

The evacuator is connected to the "high spot" of the suction volute by means of substantial tubing, and is sealed with clear water held in a reservoir built into the bedplate of the complete unit. The evacuator operates to remove air from the centrifugal pump, thus causing it to be primed.

By this arrangement it is not necessary to sacrifice efficiency and reliability for the convenience of self-priming. Since the evacuator motor is in operation only when starting the unit or when it is necessary to reprime the main pump, no more power is used than with a nonpriming unit. Likewise since the entire priming unit is compactly mounted on the bedplate between the main motor and the centrifugal pump, no more floor space or head room is required than with a nonpriming unit.

Tight Seat Insured in Swartout Type A Trap

The Swartwout type A inverted bucket trap, made by the Swartwout Co., 18511 Euclid Avenue, Cleveland, Ohio, has valve discs of stainless steel. These discs, made with machinery designed particularly for this service, are said to have a true spherical surface, which insures a tight joint between disc and seat. Both discs and seat are heat-treated to produce a hard, long-wearing surface.

In operation the valve disc first is pried from its seat with a powerful leverage. Then it is forced down and entirely out of the way. The body of the trap in operation is substantially full of water at all times. In this position the bucket floats and keeps the valve closed.

Air escapes through the small vent in the top of the bucket and collects in the top of the trap, ready to go out at the next discharge. Steam also escapes through the same vent; condensing in the water above the bucket. As water replaces this air and steam in the bucket the bucket loses its buoyancy and opens the valve.

As long as condensation continues to come into the bottom of the trap, the bucket remains down and the valve open, the water going out of the top of the trap as fast as it comes in the bottom. The last of the condensation entering the trap is followed by steam and air, which fills the bucket by displacing the water. Thereupon the bucket rises and closes the valve, and the cycle of operation is repeated.

Dardelet Thread Keeps Rod Connections Tight

Application of the Dardelet thread to oil-well sucker rods is recommended by the Dardelet Threadlock Corp., 120 Broadway, New York, as a satisfactory means of preventing the connections from working loose under the vibration of pumping. "When a sucker rod joint unscrews even slightly," says the Dardelet company in a discussion of this use of the device, "the rocking movement of the loosened box and pin sets up fatigue stresses which gradually weaken the pin. Eventually the joint unscrews entirely or the pin breaks, the string drops, and the well must be shut down until the string of rods is recovered and replaced. Unscrewing failures have, therefore, always meant an economic loss far in excess of the actual cost of material. Dardelet-threaded sucker rod joints stay tight under all operating conditions. There can be no rocking movement to set up fatigue stresses. Furthermore, like Dardelet bolts, the pins are stronger in the threaded portion than ordinary pins and suffer maximum resistance to destructive forces. It therefore follows that the costly troubles caused by unscrewing failures and pin breaks are reduced to a minimum."

The Dardelet selflocking screw thread was invented to provide threaded fastenings which will remain tight under all service conditions without lock washers, jam nuts, cotter pins, or other auxiliary locking devices. It is applied wherever screw threads are used as a fastening. It is adapted to bolts and nuts, studs, screws, threaded parts of engines and machinery, and for many special applications.

Carries Heavy Load on Soft or Sandy Ground

The Forged-Trak wheel, a tracklaying wheel made by the Athey Truss Wheel Co., 130 North Wells Street, Chicago, is designed for transporting heavy loads over ground that is soft, sandy or covered deeply with rotted vegetation. It permits the tractor to stay in high gear going up steeper grades.

This wheel is said to possess extraordinary light-running ability because of a combination of features—an arched track which is rigid, a continuous wheel track of the raised rail type, sealed track pin bearings and track wheels mounted on ball bearings. It has drop-forged track links, a box section type of track construction.

The Forged-Trak wheel is especially recommended by the manufacturer for service under sandy soil conditions owing to the sealed track pin bearings which exclude the entrance of abrasives. These track pin bearings are of the pin and bashing type, with the track link overlapping the end of the bushing. The track pins and bushings are carbonized and hardened. They are assembled with the drop-forged track links under hydraulic pressure and the track plates bolted on, forming a complete track structure. These features are designed to give exceptional life and light running qualities.

Welding Outfit Fitted for Wide Range of Use

The Oxweld automotive welding outfit has been announced by the Linde Air Products Co., 30 East Forty-second Street, New York. Although intended primarily for the auto repair shop, it's adapted for a wide range of work.

The outfit includes one Oxweld Type W-17 welding blowpipe with welding heads Nos. 6 and 8, friction lighter and wrench; one Oxweld Type W-17 to W-15 adaptor; one Oxweld Type W-15 welding head, No. 3; one Oxweld Type R-48 oxygen regulator with wrench; one Oxweld Type R-49 acetylene regulator; one 12½-foot length of one-fourth-inch oxygen hose; one 12½-foot length of three-eighths-inch acetylene hose; one pair No. 8 spectacles.

The Oxweld Type W-17 blowpipe offered in this outfit with three welding heads is a low-pressure injector type of blowpipe, extremely light and well balanced. Durability has not been sacrificed for lightness, however, as rugged design and the highest quality of workmanship insure length of life even under difficult conditions. The Type W-17 blowpipe was developed as an all-purpose blowpipe. The extent of its utility can be increased as additional facilities are required by the shop. The Type CW-17 cutting attachment attaches directly to the handle of the blowpipe in the same manner as a welding head and provides a means of cutting steel up to 3 inches in thickness. It is so compact that it may be carried in the operator's pocket when the blowpipe is being used for welding.

Lee C. Moore & Co., Inc., have moved their Houston, Tex., office from 924 Post Dispatch Building to 517 Merchants and Manufacturers Building.

Rotary Hydraulic Swivel Is Latest Regan Product

Of interest to drillers of deep wells is the Regan rotary hydraulic swivel developed by the Regan Forge & Engineering Co., San Pedro, Calif. First placed in test three years ago, it has been watched by engineers of producing companies and the manufacturer's engineers. At present it is being used in a deep well drilling for the Kettleman North Dome Association. This new type swivel has a capacity rated at 300,000 pounds, and offers automatic packing and a unique application of bearings.

During the last 18 months the company has concentrated its attention on the development of several new products, including the swivel referred to and a tubing head which permits the raising and lowering of tubing in the well and also the pulling of tubing without the necessity of killing the well. Regan engineers are credited with the development of control heads tested to hydrostatic pressures of 3,000 and 6,000 pounds, and have progressed with new equipment designed for high pressure service, according to an announcement.

With a record of having paid in excess of $500,000 in royalties on the manufacture of more than 12,000 casing control heads, 9,000 tubing heads and other products under the Trout-Butler-Rasmussen patents, the Regan company has concluded arrangements to continue for the life of patents the production of this equipment.

Paint is Said to Possess High Protective Qualities

Mabelite paint, said to possess unusual protective qualities, has been put on the market by the Eastern Mabelite Corp., 225 Mercer Street, New York. The paint is said to be an insulator, one coat stopping 1,600 volts AC current. It is said by the company to be acid-resisting, heat-resisting and of pronounced abrasive quality. It is offered as practically impervious to salt water and as a remedy for electrolysis and corrosion.

Mabelite is described as a chemically inert natural ore occurring in Comanche County, Oklahoma. Mabelite pigment No. 300, which is produced directly from the ore by grinding, is composed of several substances, principally ferric oxide, silica and alumina. The ferric oxide peculiarly impregnates the other components resulting in a remarkable dispersement of the color particles and a high degree of opacity. The silica is mostly a tough amorphous type which affords extraordinary resistance to abrasion. The alumina in Mabelite pigment No. 300 as formed by nature in combination with the other components results in an exceedingly fine unctuous material. The paint made from this pigment is expected to find wide use in the oil industry.

York Booster Produces Very Low Temperatures

The increased use of automobiles and airplanes for year-round operation has presented a problem to the refiner. Lubrication of the engines must be dependable, whether the atmospheric temperature is 100° above or 40° below zero. Hence, the low pour test oils of today must be cooled to much lower temperatures in processing than were the low pour test oils of a few years ago.

York booster compressors, made by the York Ice Machinery Corp., York, Pa., are said by the manufacturer to be producing temperatures of minus 60° F. in oil refineries. Cooling of brine for the high temperature stages of oil chilling is accomplished with an independent compressor, which also takes the discharge gas from the York booster, operating on the low temperature or final stage of oil chilling, and compresses it to condensing pressure.

Similarly, in other refineries, absorption machines are handling the high temperature stages of oil chilling, with a York booster on the low stage discharging into the absorber side of the high stage.

Oklahoma-Kansas and Eastern Pipe Line Report

OKLAHOMA-KANSAS
PIPE LINE STATEMENT FOR JUNE, 1932

Runs

	Month (bbls.)	Dly. av. (bbls.)
Gulf P. L. Co.	1,281,094	42,703
Texas P. L. Co.	801,090	26,936
Magnolia Pet. Co.	1,204,764	40,159
Empire P. L. Co.	1,922,624	64,087
Cosden P. L. Co.	558,947	18,632
Stanolind P. L. Co.	2,316,000	77,200
Oklahoma P. L. Co.	2,866,431	95,548
Other lines	4,844,000	161,467
Total June	15,594,950	519,832
Total May	16,605,809	535,671
Difference	1,010,859	15,839

Shipments

	Month (bbls.)	Dly. av. (bbls.)
Gulf P. L. Co.	942,142	31,405
Texas P. L. Co.	1,098,135	35,604
Magnolia Pet. Co.	1,485,375	49,513
Empire P. L. Co.	1,728,561	57,619
Cosden P. L. Co.	569,389	18,996
Stanolind P. L. Co.*	3,573,570	119,119
Oklahoma P. L. Co.	2,754,505	91,817
Other lines	4,800,000	150,000
Total June	16,652,178	555,072
Total May	17,016,936	548,932
Difference	1,364,758	6,141

Stocks

Sinclair Prairie Oil Co.	35,894,606
Gulf P. L. Co. and Gypsy Oil Co.	7,884,095
The Texas Company	2,778,827
Magnolia Petroleum Co.	7,994,960
Empire P. L. Co.	5,510,660
Mid-Continent Petroleum Corp.	2,443,183
Stanolind Crude Oil Pur. Co.	16,933,000
Oklahoma P. L. Co.	2,196,400
Carter Oil Co.	2,197,783
Other lines	14,328,000
Total June	97,460,903
Total May	99,261,701
Difference	1,800,792

*Includes shipments of Texas crude oil.

EASTERN PIPE LINE REPORT FOR MONTH OF JUNE

Runs From Wells

In the following table will be found the regular receipts from wells by various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky, Illinois, Indiana and Michigan for May and June:

	May, '32	June, '32
Nat. Transit	151,951.45	144,953.51
S. W. Pa. P. L.	71,779.11	74,636.04
Eureka P. L.	276,906.64	284,902.07
Buckeye P. L. (Macksburg)	251,442.44	255,814.51
Buckeye P. L. (Cleveland)	12,377.90	12,368.10
Buckeye P. L. (Lima, etc.)	86,475.79	90,909.75
Indiana P. L.	2,672.22	3,132.06
N. Y. Transit	44,012.00	43,716.25
Tide Water P. L.	25,554.15	24,651.06
Pure Oil	423,749.02	397,731.81
Stoll Oil Ref.	58,953.00	39,472.90
Bradford Trans	427,172.23	419,696.68
Ashland Ref.	.....	139,179.30
Total	1,832,255.95	1,931,155.54
Daily average	59,105.03	64,371.85

Petroleum Deliveries

The following tables exhibit the shipments or regular deliveries of various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for May and June:

	May, '32	June, '32
Nat. Transit	569,129.70	531,479.14
S. W. Pa. P. L.	465,630.47	347,391.97
Eureka P. L.	289,963.58	326,763.56
Buckeye P. L. (Macksburg)	231,855.64	271,862.46
Buckeye P. L. (Cleveland)	1,708.49	1,955.30
Buckeye P. L. (Lima, etc.)	1,381,245.31	1,425,243.21
Indiana P. L.	1,188,666.66	1,000,264.12
Southern P. L.	43,893.07	65,383.50
N. Y. Transit	192,967.42	194,532.17
Northern P. L.	167,202.66	98,284.38
Tide Water P. L.	412,438.33	501,453.99
Pure Oil	572,755.77	487,086.69
Bradford Trans.	452,206.39	436,376.77
Tuscarora Dev.	275,873.53	340,897.93
Total	6,243,527.02	6,048,975.19
Daily average	201,404.09	201,632.51

Gross Stocks

The gross stocks held by various pipe lines in the oil producing sections of New York, Pennsylvania, West Virginia, Ohio, Indiana and Kentucky at the close of May and June:

	May, '32	June, '32
Nat. Transit	678,894.46	704,495.00
S. W. Pa. P. L.	518,480.70	524,603.77
Eureka P. L.	1,224,629.00	1,173,808.19
Buckeye P. L. (Macksburg)	277,198.32	306,904.25
Buckeye P. L. (Cleveland)	36,629.14	30,067.94
Buckeye P. L. (Lima, etc.)	3,160,170.66	3,311,429.11
Indiana P. L.	502,451.61	473,754.90
Southern P. L.	197,231.45	265,226.94
N. Y. Transit	167,533.00	105,004.59
Northern P. L.	316,314.96	311,480.61
Tide Water P. L.	832,349.04	655,876.80
Pure Oil	711,101.37	706,372.31
Tuscarora	9,033.34	8,329.21
Bradford Trans.	253,149.84	257,371.07
Total	8,336,726.89	8,732,724.69
Decrease	72,934.25	103,002.20

Grades of Oil

The following table shows the amount of the different grades of oil held by the Eastern pipe lines at the close of May and June showing gross stocks of the above fields:

	May, '32	June, '32
Pennsylvania	3,082,290.24	3,006,429.19
Lima	527,816.96	500,135.35
Kentucky	9,997.41	10,008.41
Mid-Continent	4,552,128.56	4,467,170.93
Illinois	2,904.86	113,915.02
Michigan	660,588.86	636,065.79
Total	8,835,726.89	8,732,724.69

Daily Average Runs

The following table shows the daily average runs of the Pennsylvania, Lima and Kentucky oil fields for the past four years:

	1929	1930	1931	1932
January	51,749	75,907	53,939	53,501
February	51,833	79,256	55,163	55,498
March	54,252	76,683	54,321	57,199
April	58,444	84,536	54,914	57,348
May	59,902	80,416	53,344	59,105
June	58,333	75,430	54,110	64,371
July	66,087	68,921	50,723	.....
August	66,087	54,291	51,503	.....
September	67,315	56,595	61,345	.....
October	76,093	58,179	65,595	.....
November	74,831	52,332	59,819	.....
December	74,561	53,999	61,835	.....

Daily Average Shipments

The following table gives daily average shipments from the Pennsylvania, Lima and other fields for the past four years:

	1929	1930	1931	1932
January	165,721	217,622	175,369	186,551
February	159,387	224,355	183,494	169,856
March	161,474	228,846	189,508	188,793
April	169,737	241,845	191,450	202,036
May	184,281	248,383	199,247	201,404
June	185,404	234,401	221,155	201,632
July	194,763	207,094	211,632	.....
August	194,946	205,506	224,166	.....
September	201,214	193,999	217,537	.....
October	191,867	157,675	210,821	.....
November	202,743	146,638	196,425	.....
December	186,257	143,001	176,241	.....

Gross Stocks

In the following table will be found the gross stocks of the various lines of the Pennsylvania, Lima and Kentucky oil fields, including oil received from other lines at the close of each month for the past three years:

	1930	1931	1932
January	12,220,045	11,831,092	9,023,914
February	12,991,561	11,506,489	8,974,350
March	13,247,217	11,012,162	8,802,192
April	13,233,961	11,044,481	8,908,661
May	13,052,953	10,728,239	8,835,726
June	13,396,855	9,903,349	8,732,724
July	13,266,562	9,563,849	.....
August	13,047,051	9,192,457	.....
September	12,812,018	8,492,431	.....
October	12,437,553	8,417,694	.....
November	11,851,380	8,830,386	.....
December	11,751,952	9,119,032	.....

The Illinois Field

The following table gives the report of the Illinois Pipe Line Co. in Illinois:

Gross stocks, July 1	514,538.45
Runs from wells	477,227.20
Other receipts	56,670.61
Regular deliveries	246,624.72
Other deliveries	358,725.80

The amount of Illinois oil run by the Tide Water Pipe Co. in June was 24,651.06 bbls. Deliveries were 17,078.97 bbls. Adding these figures to those of the Illinois Pipe Line Co. makes the runs and deliveries as follows:

1932—	Runs	Deliveries
June	501,878.26	263,703.70
1931—		
January	468,429.04	669,573.19
February	429,284.54	461,262.85
March	424,638.23	356,663.26
April	421,814.98	282,532.65
May	463,231.80	322,513.95
June	510,805.78	320,258.13
July	520,009.38	289,219.05
August	476,623.56	393,231.06
September	492,183.83	323,012.50
October	498,124.13	325,834.95
November	470,302.63	281,258.48
December	515,771.28	306,623.19
1932—		
January	500,177.12	246,634.10
February	482,561.50	186,010.30
March	565,538.70	270,617.75
April	461,920.92	285,817.98
May	521,884.64	279,859.88

Tide Water Pipe Co., Ltd., also delivered in June 130,253.87 bbls. Oklahoma oil.

Average Daily Imports of Crude and Refined Oil at Principal United States Ports

Average barrels per day in 1931-32—	ATLANTIC PORTS: Baltimore	Boston	New York	Philadelphia	Others	Total	GULF COAST PORTS: Galveston	New Orleans, Port Arthur, Baton Rouge	Sabine Pass	Tampa	Total	Total all ports
July	26,387	11,226	104,678	29,323	21,773	193,387	6,903	7,419	4,194	.....	18,516	211,903
August	52,613	15,581	91,742	32,387	25,741	168,064	4,161	2,516	.....	3,162	9,839	197,903
September	27,067	7,267	106,867	20,099	22,967	184,267	4,833	8,333	.....	.....	13,166	197,433
October	53,710	14,484	100,774	26,742	40,645	236,355	6,097	6,871	2,097	1,838	16,903	253,258
November	45,033	28,800	51,667	28,600	12,967	170,067	3,933	10,833	3,033	1,367	19,166	189,233
December	20,258	16,806	121,807	31,645	34,258	224,774	1,968	4,355	.....	.....	6,323	231,097
1932—												
January	19,161	8,161	104,065	24,194	34,903	190,484	4,871	7,226	2,096	1,484	15,677	206,161
February	32,483	16,517	128,483	28,862	34,552	240,897	2,034	5,207	4,310	1,379	12,930	253,827
March	25,806	10,516	167,806	38,677	48,129	290,935	5,936	29,774	.....	1,516	47,226	338,161
April	37,167	13,467	158,233	38,733	39,400	292,000	6,767	44,600	2,167	3,333	54,867	346,867
May	31,161	2,065	170,226	50,774	14,935	269,161	903	710	4,194	1,516	7,323	276,484
June	10,900	11,700	189,300	22,733	29,900	294,533	.....	.....	12,867	.....	12,867	307,400

Average Daily Receipts of California Crude and Refined Oil at Atlantic and Gulf Ports

Average barrels per day in 1931-32—	ATLANTIC PORTS: Baltimore	Boston	New York	Philadelphia	Others	Total	GULF COAST PORTS: Galveston	New Orleans, Port Arthur, Baton Rouge	Sabine Pass	Tampa	Total	Total all ports
July	6,774	1,194	24,612	11,065	9,902	53,548	.....	.....	.....	.....	1,335	54,903
August	3,452	.....	16,419	7,419	4,290	31,580	.....	.....	.....	.....	968	32,548
September	4,267	3,667	12,933	4,699	7,367	32,933	.....	.....	.....	.....	4,000	36,933
October	3,355	1,129	19,290	16,709	9,323	48,806	.....	.....	.....	.....	3,323	52,129
November	1,900	.....	22,800	11,567	.....	35,367	.....	.....	.....	.....	3,366	38,733
December	3,161	.....	22,484	8,839	6,032	40,516	.....	.....	.....	.....	7,742	48,258
1932—												
January	3,871	1,710	14,483	3,774	5,710	29,548	.....	.....	.....	.....	.....	29,548
February	8,069	.....	9,102	4,862	.....	17,034	.....	.....	.....	.....	2,483	19,517
March	1,516	.....	6,065	.....	.....	7,581	.....	.....	.....	.....	.....	7,581
April	3,566	.....	19,333	3,867	4,833	31,533	.....	.....	.....	.....	.....	31,533
May	2,161	.....	15,226	13,774	3,871	40,032	.....	.....	.....	.....	.....	40,032
June	2,500	.....	17,333	3,933	833	24,600	.....	.....	.....	.....	.....	24,600

Gross Production of Crude Oil in the United States for 12 Months

(In Barrels of 42 Gallons)

1931—		California	Oklahoma	Texas	Kansas	Arkansas	Louisiana	Rocky Mts.	Eastern	Total
July:	Month	16,093,322	16,420,380	33,827,213	3,089,832	1,287,585	1,715,730	2,905,909	3,341,000	78,680,671
	Daily average	519,139	529,690	1,091,200	99,672	41,535	55,345	93,739	107,774	2,538,078
August:	Month	15,663,984	9,517,379	32,279,816	3,141,323	1,165,569	1,584,444	2,807,143	3,167,000	69,331,558
	Daily average	505,451	307,009	1,041,284	101,333	37,599	51,111	90,553	102,161	2,236,502
September:	Month	15,180,610	7,946,380	28,981,525	3,147,030	1,138,280	1,641,384	2,761,230	3,632,000	64,429,039
	Daily average	506,020	264,896	966,051	104,901	37,946	54,713	92,041	121,067	2,180,968
October:	Month	15,651,982	12,951,892	30,725,173	3,177,066	1,173,389	1,822,255	2,797,597	3,906,050	72,198,356
	Daily average	504,902	417,803	991,134	102,486	37,819	58,782	90,247	125,807	2,328,979
November:	Month	14,997,700	16,430,730	28,360,561	3,131,670	1,130,700	1,851,577	2,706,390	3,639,000	72,748,328
	Daily average	499,923	547,691	945,018	104,389	37,690	61,719	90,213	121,300	2,424,946
December:	Month	15,560,984	14,593,299	27,767,651	3,195,642	1,082,148	1,971,817	2,816,759	3,645,000	72,641,300
	Daily average	501,967	535,429	901,860	103,182	34,908	63,607	90,863	117,581	2,343,263
1932—										
January:	Month	15,532,141	13,664,149	26,409,838	3,170,587	1,101,616	1,792,398	2,444,164	3,566,000	67,680,893
	Daily average	501,037	440,779	851,930	102,277	35,536	57,819	78,844	115,032	2,183,255
February:	Month	14,616,362	11,806,190	23,858,375	2,835,339	1,008,562	1,617,087	2,420,224	3,294,000	61,460,139
	Daily average	504,030	407,110	822,703	97,391	34,778	55,762	83,456	113,586	2,119,315
March:	Month	15,575,915	12,998,796	26,162,647	3,042,929	1,062,897	1,703,145	2,617,392	3,552,000	66,716,721
	Daily average	502,449	419,316	843,956	98,159	34,287	54,942	84,432	114,613	2,152,152
April:	Month	15,524,444	13,718,020	26,362,851	2,974,080	1,043,520	1,858,957	2,525,040	3,684,000	66,696,012
	Daily average	517,481	423,934	878,762	99,136	34,954	61,965	84,168	122,800	2,223,200
May:	Month	15,575,741	13,169,420	27,328,472	3,038,930	1,064,602	2,012,701	2,600,633	3,809,000	68,599,549
	Daily average	502,443	424,820	881,564	98,030	34,342	64,926	83,893	122,871	2,212,889
June:	Month	14,118,970	12,757,220	26,161,092	2,837,179	1,022,970	1,857,433	2,416,680	3,699,000	64,870,554
	Daily average	455,451	425,241	872,036	94,573	34,099	61,914	80,556	123,300	2,162,352
Total 12 months		184,097,656	156,978,966	338,725,214	36,788,107	13,286,038	21,428,928	31,819,211	42,929,000	826,053,130

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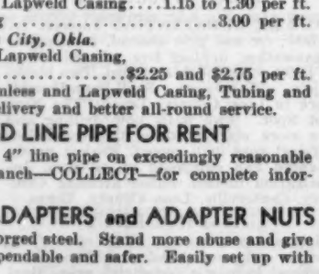

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